

Service Manual

• KEH-8100B


**ORDER NO.
CRT 1264**

CASSETTE CAR STEREO WITH FM/MW/LW ELECTRONIC TUNER

KEH-8100SDK WG
KEH-8100B EW
KEH-8101B X1B

CASSETTE CAR STEREO WITH FM/AM ELECTRONIC TUNER

KEH-8100QR US
KEH-8150QR ES, CA
KEH-700QR US

Note:

- See the service manual KEX-M800 (CRT1234) for the cassette mechanism description.

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1. SPECIFICATIONS

● KEH-8100SDK, KEH-8100B, KEH-8101B

General

Power source 14.4 V DC (10.8 – 15.6 V allowable)
 Grounding system Negative type
 Max. current consumption 7.5 A
 Dimensions (chassis) 178(W) × 50(H) × 150(D) mm
 (nose) 188(W) × 58(H) × 13(D) mm
 Weight 1.6 kg

Amplifier

Maximum power output 25 W × 2/15 W × 4 (EIAJ)
 Continuous power output 11 W × 2 (1 % dist. at 1 kHz)
 Load impedance 4 Ω (4 – 8 Ω allowable)
 Max. output level/output impedance (pre out) 250 mV/1 kΩ
 Tone controls (bass) ±10 dB (100 Hz)
 (treble) ±10 dB (10 kHz)
 Loudness contour +12 dB (100 Hz), +7 dB (10 kHz)
 (volume: –30 dB)

Tape player

Tape Compact cassette tape (C-30 – C-90)
 Tape speed 4.76 cm/sec. (+0.14 cm/sec., –0.05 cm/sec.)
 Fast forward/rewind time Approx. 100 sec. for C-60
 Wow & flutter 0.08% (WRMS)
 Frequency response Metal: 30 – 19,000 Hz (±3 dB)
 Stereo separation 45 dB
 Signal-to-noise ratio
 Metal: Dolby B NR IN: 66 dB (IEC-A network)
 Dolby NR OUT: 60 dB (IEC-A network)

FM tuner

Frequency range 87.5 – 108 MHz
 Usable sensitivity 11 dBf (1.0 μV/75 Ω, mono, S/N 30 dB)
 50 dB quieting sensitivity 16 dBf (1.7 μV/75 Ω, mono)
 Signal-to-noise ratio 70 dB (IEC-A network)
 Distortion 0.3% (at 65 dBf, 1 kHz, stereo)
 Frequency response 30 – 15,000 Hz (±3 dB)
 Stereo separation 40 dB (at 65 dBf, 1 kHz)

MW tuner

Frequency range 531 – 1,602 kHz
 Usable sensitivity 18 μV (25 dB) (S/N: 20 dB)
 Selectivity 50 dB (±9 kHz)

LW tuner

Frequency range 153 – 281 kHz
 Usable sensitivity 30 μV (30 dB) (S/N: 20 dB)
 Selectivity 50 dB (±9 kHz)

Note:

Specifications and the design are subject to possible modification without notice due to improvements.

● KEH-8150QR/ES

General

Power source 14.4 V DC (10.8 – 15.6 V allowable)
 Grounding system Negative type
 Max. current consumption 7.5 A
 Dimensions (chassis) 178(W) × 50(H) × 150(D) mm
 (nose) 188(W) × 58(H) × 13(D) mm
 Weight 1.6 kg

Amplifier

Maximum power output 25 W × 2/15 W × 4 (EIAJ)
 Continuous power output 11 W × 2 (1 % dist. at 1 kHz)
 Continuous power output is 10 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.
 Load impedance 4 Ω (4 – 8 Ω allowable)
 Max. output level/output impedance (pre out) 500 mV/1 kΩ
 Tone controls (bass) ±10 dB (100 Hz)
 (treble) ±10 dB (10 kHz)
 Loudness contour +12 dB (100 Hz), +7 dB (10 kHz)
 (volume: –30 dB)

Tape player

Tape Compact cassette tape (C-30 – C-90)
 Tape speed 4.76 cm/sec. (+0.14 cm/sec., –0.05 cm/sec.)
 Fast forward/rewind time Approx. 100 sec. for C-60
 Wow & flutter 0.08% (WRMS)
 Frequency response Metal: 30 – 19,000 Hz (±3 dB)
 Stereo separation 45 dB
 Signal-to-noise ratio
 Metal: Dolby B NR IN: 66 dB (IEC-A network)
 Dolby NR OUT: 60 dB (IEC-A network)

FM tuner

Frequency range 87.5 – 108 MHz
 Usable sensitivity 11 dBf (1.0 μV/75 Ω, mono, S/N 30 dB)
 50 dB quieting sensitivity 16 dBf (1.7 μV/75 Ω, mono)
 Signal-to-noise ratio 70 dB (IEC-A network)
 Distortion 0.3% (at 65 dBf, 1 kHz, stereo)
 Frequency response 30 – 15,000 Hz (±3 dB)
 Stereo separation 40 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range 531 – 1,602 kHz
 530 – 1,710 kHz (10 kHz)
 Usable sensitivity 18 μV (25 dB) (S/N: 20 dB)
 Selectivity 50 dB (±9 kHz)
 50 dB (±10 kHz)

Note:

Specifications and the design are subject to possible modification without notice due to improvements.

• KEH-8150QR/CA

General

Amplifier

Continuous power output is 10 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.
Maximum power output 25 W \times 2/15 W \times 4 (EIAJ)
Load impedance 4 Ω (4 – 8 Ω allowable)
Preamplifier output level/impedance 500 mV/1 k Ω
Tone controls (bass) ± 10 dB (100 Hz) (treble) ± 10 dB (10 kHz)
Loudness contour +12 dB (100 Hz), +7 dB (10 kHz) (volume: -30 dB)

Tape player

Tape	Compact cassette tape (C-30 - C-90)
Tape speed	4.76 cm/sec. (+0.14 cm/sec., -0.05 cm/sec.)
Fast forward/rewind time	Approx. 100 sec. for C-60
Wow & flutter	0.08% (WRMS)
Frequency response	Metal: 30 - 22,000 Hz (± 3 dB)
Stereo separation	45 dB
Signal-to-noise ratio	
	Metal: Dolby C NR IN: 72 dB (IHF-A network)
	Dolby B NR IN: 66 dB (IHF-A network)
	Dolby NR OUT: 60 dB (IHF-A network)

FM tuner

Frequency range	87.9 – 107.9 MHz
Usable sensitivity	11 dBf (1.0 μ V/75 Ω , mono, S/N 30 dB)
50 dB quieting sensitivity	16 dBf (1.7 μ V/75 Ω , mono)
Signal-to-noise ratio	70 dB (IHF-A network)
Distortion	0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response	30 – 15,000 Hz (± 3 dB)
Stereo separation	40 dB (at 65 dBf, 1 kHz)
Selectivity	70 dB (ZACA) (± 400 kHz)
Three-signal intermodulation (desire signal level)	
	50 dBf (two undesire signal level: 110 dBf)

AM tuner

Frequency range 530 - 1,710 kHz
 Usable sensitivity 18 µV (25 dB) (S/N: 20 dB)
 Selectivity 50 dB (+10 kHz)

Note:

Specifications and the design are subject to possible modification without notice due to improvements.

- KEH-8100QR, KEH-700QR

General

Power source	14.4 V DC (10.8 – 15.6 V allowable)
Grounding system	Negative type
Max. current consumption	7.5 A
Dimensions (chassis)	178(W) × 50(H) × 150(D) mm [7(W) × 2(H) × 5-7/8(D) in.]
(nose)	188(W) × 58(H) × 13(D) mm [7-3/8(W) × 2-1/4(H) × 1/2(D) in.]
(mounting bracket)	182(W) × 52(H) × 166(D) mm [7-1/8(W) × 2(H) × 6-1/2(D) in.]

Tape player (KEH-8100QR)

Tape	Compact cassette tape (C-30 - C-90)
Tape speed	4.76 cm/sec. (+0.14 cm/sec., -0.05 cm/sec.)
Fast forward/rewind time	Approx. 100 sec. for C-60
Wow & flutter	0.08% (WRMS)
Frequency response	Metal: 30 - 19,000 Hz (± 3 dB)
Stereo separation	45 dB
Signal-to-noise ratio	Metal: Dolby B NR IN: 66 dB (IEC-A network) Dolby NR OUT: 60 dB (IEC-A network)

Tape player (KEH-7000QB)

Tape	Compact cassette tape (C-30 - C-90)
Tape speed	4.76 cm/sec. (+0.14 cm/sec., -0.05 cm/sec.)
Fast forward/rewind time	Approx. 10 sec. for C-60
Wow & flutter	0.08% (WRMS)
Frequency response	Metal: 30 - 22,000 Hz (± 3 dB)
Stereo separation	45 dB
Signal-to-noise ratio	

FM tuner

FM tuner	
Frequency range	87.9 – 107.9 MHz
Usable sensitivity	11 dBf (1.0 μ V/75 Ω , mono, S/N 30 dB)
50 dB quieting sensitivity	16 dBf (1.7 μ V/75 Ω , mono)
Signal-to-noise ratio	70 dB (IHF-A network)
Distortion	0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response	30 – 15,000 Hz (± 3 dB)
Stereo separation	40 dB (at 65 dBf, 1 kHz)
Selectivity	70 dB (2A CA) (± 400 kHz)
Three-signal intermodulation (desire signal level)	

• • • •

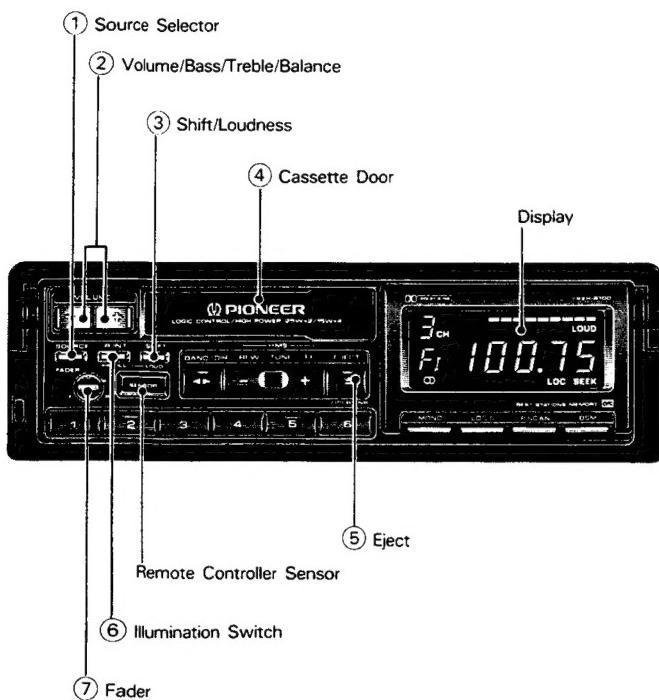
AM tuner	
Frequency range	530 – 1,710 kHz
Usable sensitivity	18 μ V (25 dB) (S/N: 20 dB)
Selectivity	50 dB (+10 kHz)

These specifications were determined and are presented in accordance with specification standards established by the Ad Hoc Committee of Car Stereo Manufacturers.

Note:

NOTE: Specifications and the design are subject to possible modification without notice due to improvements.

2. ADJUSTING VOLUME AND TONE



Switching Power On

Radio

Press Button (1) to switch the tuner power on. Press Button (1) again to switch the power off.

Tape

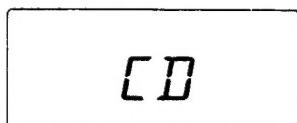
Insert the cassette tape through the Cassette Door (4), and the power will be automatically turned on to get the tape start being played back. To eject the tape, press the button (5).

- You will hear a few consecutive clicks from your unit when you have started the engine with the cassette tape inserted or when you have again mounted your unit on the Quick Release Mounting Bracket following dismantling. The sounds are only the sign of your unit's mechanical preparation being made, but does not indicate at all its functional failure.

Changing the Source

When the cassette tape is inserted, the source changes at each press of the button (1): Tape → Radio → OFF. When an optionally available CD player, such as a CDX-4, is connected to the unit through the external input terminal, the source changes at each press of Button (1): Tape → Radio → CD Player.

- "CD" appears on the display when the CD player is in operation.



- If a CD player connected to the unit's external input terminal is playing, the unit will not turn off even if Button (1) is pressed. To turn off the unit, stop the disc play before turning off the power.

Adjusting Volume/Bass/Treble/Balance

To adjust volume, press the button (2). The display changes at each press of the button (3): Volume → Bass → Treble → Balance. Press the button (2) to adjust the displayed mode.

Adjusting Volume

Pressing the (+) side of Button (2) increases the volume, while the (-) side decreases it.



Adjusting Bass

Pressing the (+) side of Button (2) increases bass, while the (-) side decreases bass.



Adjusting Treble

Pressing the (+) side of Button (2) increases treble, while the (-) side decreases treble.



Adjusting Balance

Pressing the (-) side of Button (2) shifts the balance to the left speaker, while the (+) side shifts it to the right speaker.



- When you're adjusting bass, treble or balance settings, the indicator will stop at the center setting. About 5 seconds after adjustment has been made, the display returns to its previous state.

Adjusting the Fader

In the case of a 4-speaker system, this function controls the balance between the front and rear speakers. Turning Knob (7) to the left shifts the balance to the front speaker, and turning it to the right shifts the balance to the rear speaker. In the case of a 2-speaker system, set the knob at the center position.

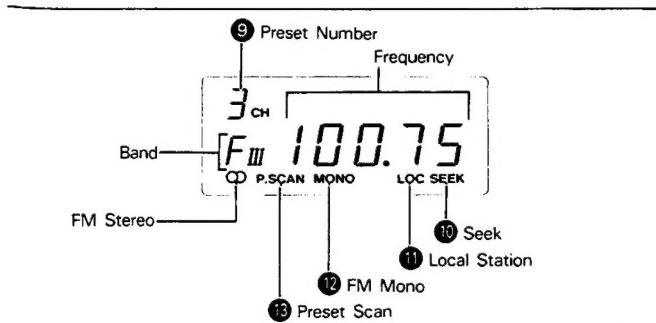
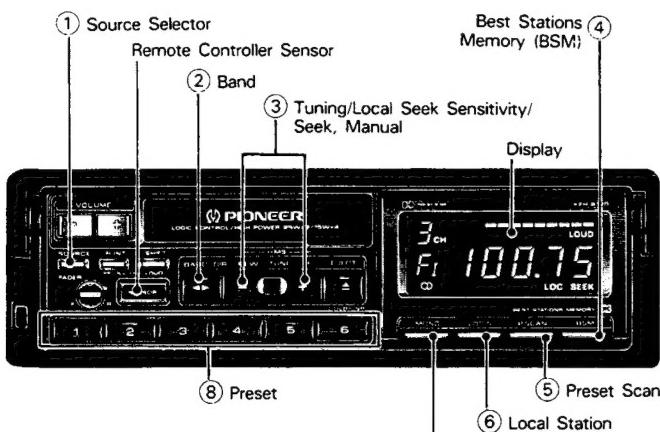
Using the Loudness Function

Press button (3) for about two seconds and the "LOUD" indication will appear on the display. This loudness function lets you enhance both high and low frequencies to give a more natural sound at low volumes. To cancel this function, press button (3) again for about two seconds.

Switching Illumination Colour

You can select either green or amber for the switch illumination color. To switch the color, hold down Button (6) for two seconds.

3. USING THE RADIO



- 1** Press Button ① to switch the radio power on.
- 2** Press Button ② to select a band.
 $F_1 \rightarrow F_2 \rightarrow F_3 \rightarrow M/L$
(FM1) (FM2) (FM3) (MW/LW)
- 3** Use Button ③ to switch between MW (531–1,602 kHz) and LW (153–281 kHz).
- 4** Use seek tuning to tune in a frequency.
Confirm that the SEEK indicator ⑩ is shown on the display (if not, press the (+) and (-) sides of Button ③ at the same time). Press the (+) side of Button ③ to automatically tune in the next higher receivable frequency, and the (-) side for a lower frequency.
- 5** Adjust volume and tone (see page 4).
- 6** Assign the tuned frequency to one of the buttons in Bank ⑧ (preset memory).
Press and hold down one of the buttons in Bank ⑧ for at least two seconds. The frequency is assigned to the selected button when the preset number ⑨ stops flashing on the display. Up to 18 FM stations (6 each for FM1, FM2 and FM3), and six MW/LW stations can be assigned to the preset memory buttons in Bank ⑧.
- 7** Once a frequency is assigned to a button in Bank ⑧, you just need to press that button to tune it in.
This also causes the number of the button pressed to appear at Position ⑨ on the display.

Preset Scan Tuning

This function lets you automatically monitor the stations assigned to the preset buttons.

1. Press the button ⑤, and "P.SCAN" ⑩ will light up and the preset number ⑨ flash.

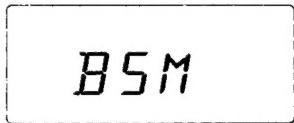
Each station assigned to the buttons in Bank ⑧ will be automatically tuned in for about eight seconds.

2. When you hear a station that you like, press Button ⑤ again to cancel preset scan tuning and remain at that station.

BSM (Best Stations Memory)

This function automatically locates stronger stations and automatically assigns their frequencies to the buttons in Bank ⑧, from strongest to weakest. It comes in handy when trying to find local stations while driving.

1. Press Button ② and select a band.
2. Hold down Button ④. After about two seconds, a "beep" will sound to signal that the BSM search has started. At this time, "BSM" will flash on the display.



3. The frequency display will return once BSM search is complete, and frequencies are assigned to buttons 1 through 6 in Bank ⑧.
- At the end of the BSM search, the displayed frequency is that assigned to Button ① of Bank ⑧.
- If there are fewer than six strong stations in the area, some of the buttons in Bank ⑧ will not be assigned frequencies, so they will retain any frequencies assigned to them previously.
- BSM search may take as long as 30 seconds in areas where there are few strong stations.
- You can cancel BSM search by pressing Button ②.

Manual Tuning

Use manual tuning when stations are too weak to be picked up by seek tuning.

1. Press both (+) and (-) sides of Button ③ at the same time to clear "SEEK" ⑩.
2. Each press of the (+) side of Button ③ increases the frequency in 50 kHz steps in the FM band, 9 kHz in the MW band and 1 kHz in the LW band. Pressing the (-) side of Button ③ decreases the frequency. Holding down either side of Button ③ changes the frequency at high speed.

Switching between FM Stereo and Mono

Generally, it is best to allow the ARC (Automatic Reception Control) function to automatically set the optimum listening conditions. When there is a large amount of noise, you can press Button ⑦ for clearer mono reception ("MONO" ⑫ will appear on the display).

Adjusting Seek Sensitivity

The seek tuning function of this tuner lets you select between a local setting for reception of strong stations only, and a DX (distant) setting for reception of weaker stations. The local setting also has four seek tuning sensitivity levels for FM and two levels for MW/LW to match local conditions.

Changing the Local Seek Sensitivity

1. Use Button ② to select a band.
2. Hold down the button ⑥ for more than two seconds, and the display will show you the current local seek sensitivity for about five seconds.



3. While the local seek sensitivity remains on the display, press the (+) side of Button ③ to increase the sensitivity level, and the (-) side to decrease the level as shown below.

FM : LOC-1 ~~LOC-2~~ LOC-2 ~~LOC-3~~ LOC-3 ~~LOC-4~~ LOC-4

MW/LW: LOC-1 ~~LOC-2~~ LOC-2

The LOC-4 setting allows reception of only the strongest stations, while lower settings let you receive progressively weaker stations.

- The display of local seek sensitivity returns to the frequency when about five seconds have elapsed after the change of sensitivity.

Switching between Local and DX

Press Button ⑥ to switch between Local and DX (distant) seek tuning.

When "LOC" ⑪ is shown on the display, seek tuning is performed with the local seek sensitivity. Otherwise, seek tuning is performed with the DX seek sensitivity.

• Note on LW Band Seek Tuning

The following shows changes in LW BAND broadcast frequency steps enacted by WARC/1979. The underlined italic figures indicate changes.

A. Up to January 1986

155-164-173-182-191-200-209-218-227-236-245-254 ~~263~~
272-281

B. From February 1986

153-162-171-180-189-200-209-218-227-236-245-254 ~~263~~
272-281

C. From February 1988

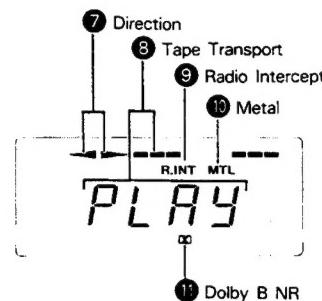
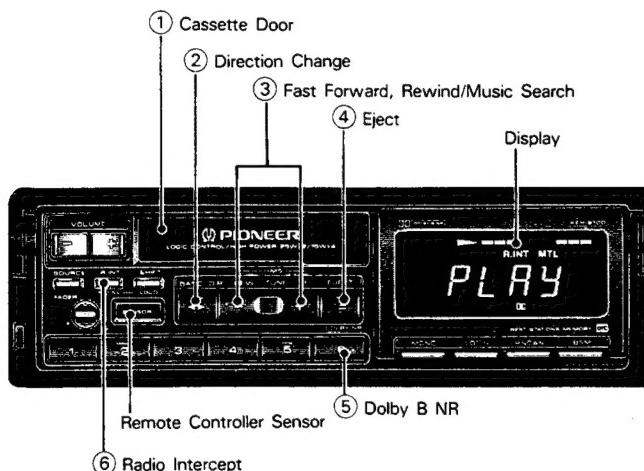
153-162-171-180-189-198-207-216-225-234-245-254 ~~263~~
272-281

D. From February 1990

153-162-171-180-189-198-207-216-225-234-243-252 ~~261~~
270-279

The LW BAND SEEK operations of this unit are performed in 9 kHz steps starting from 153 kHz. In the case of C, the first ten frequencies are identical to each station being broadcasted, while the remaining five are shifted (2 kHz each). Consequently, manual tuning (in 1 kHz steps) and seek tuning should be used together to tune in the desired LW broadcast. It is also suggested that your favorite LW stations will be memorized for instant recall.

4. USING THE TAPE DECK



1 Insert the cassette tape into the slot ①, and power will be turned on and the tape begin being played back.

At this time, the tape running indicator ⑧ and the tape running direction indicator ⑦ will light up.

2 Adjust volume and tone (see page 4).

3 To eject the cassette tape, press the button ④.

- Power is automatically turned off when the cassette tape has not been set within a few seconds. When this happens, remove the tape by pressing the button ④, because of a possible trouble with the tape.

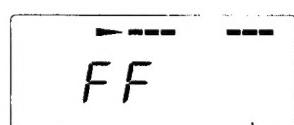
- A loose or warped label on a cassette tape may interfere with the eject mechanism of the unit or cause the cassette to become jammed in the unit. Avoid using such tapes or remove such labels from the cassette before attempting use.

Changing Program

Press the button ② to change the side of tape from A to B or vice versa.

Using Fast Forward and Rewind

1. To forward tape fast, press the (+) side of the button ③.



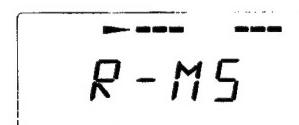
To rewind tape, press the (-) side.



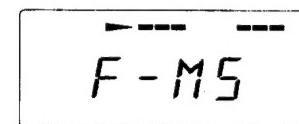
2. To release the Fast Forward or Rewind function, press the button ②.

Using Music Search

1. To repeat the current selection (A), press the (-) side of the button ③ two consecutive times.



To hear the following piece of music (B) rather than continue the current selection, press the (+) side of the button ③ two consecutive times. Pressing the button ③ three consecutive times makes the normal sequence of playing resume.



2. To release the Music Search function, press the button ②.

Dolby B NR

To hear a tape recorded using a Dolby NR system, press the button ⑤. ("DOLBY" ⑪ appears).

Auto Tape Selector

When a cassette tape is inserted, the automatic tape selector determines the tape type, and switches between 70 µs and 120 µs equalization. When it is a metal or chrome tape, "MTL" ⑩ comes on. When it is a normal tape, nothing comes on.

Using Radio Intercept

Use Radio Intercept to hear radio while Fast Forward or Rewinding.

1. Press the button ⑥ ("R.INT" ⑨ appears) before Fast Forward or Rewinding, and you will hear radio.

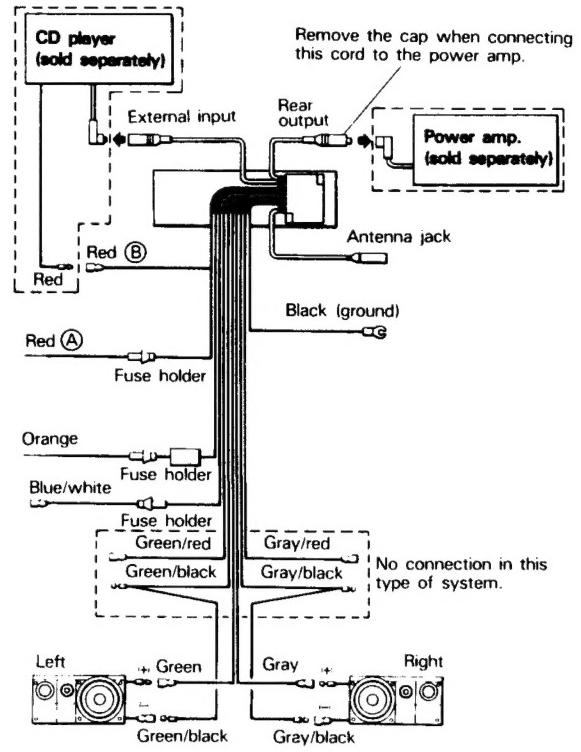
2. To release the Radio Intercept function, press the button ⑥ again.

- The Radio Intercept does not function when the Music Search is in operation.

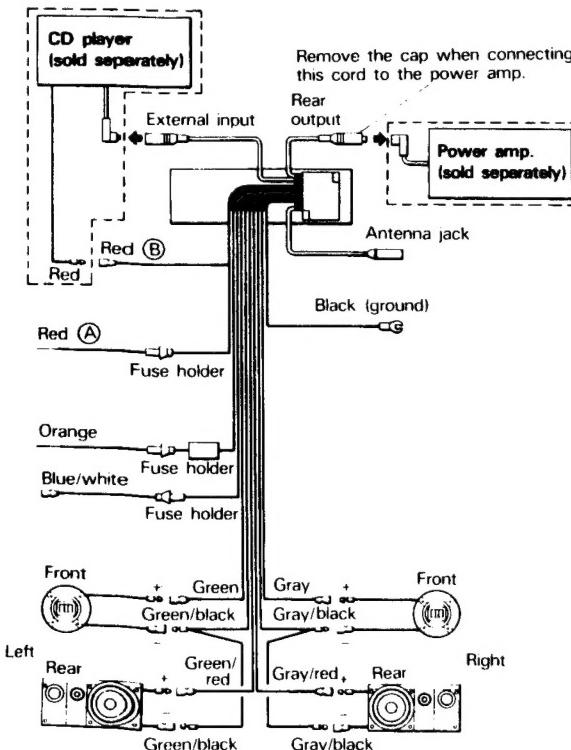
5. CONNECTIONS

Blue/white	To auto-antenna power terminal (Max. 300 mA 12 V DC).
Orange	To terminal always supplied with power regardless of ignition switch position.
Red (A)	To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
Red (B)	To red lead (for accessory power supply) of CD player. Remove the cap when connecting this cord to the CD player.
Black (ground)	To vehicle (metal) body.

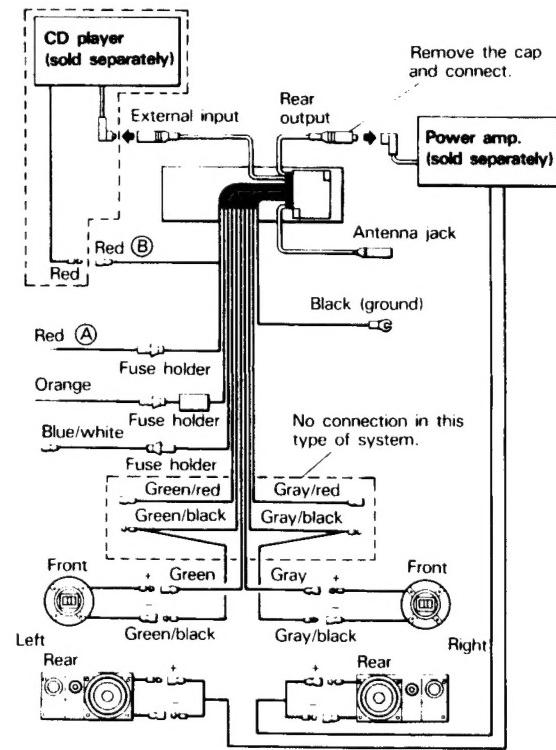
2-speaker system



4-speaker system 1



4-speaker system 2



6. DISASSEMBLY

• Removing the Quick Release Handle Assy

1. Remove the two screws, and then remove the quick release handle assy.

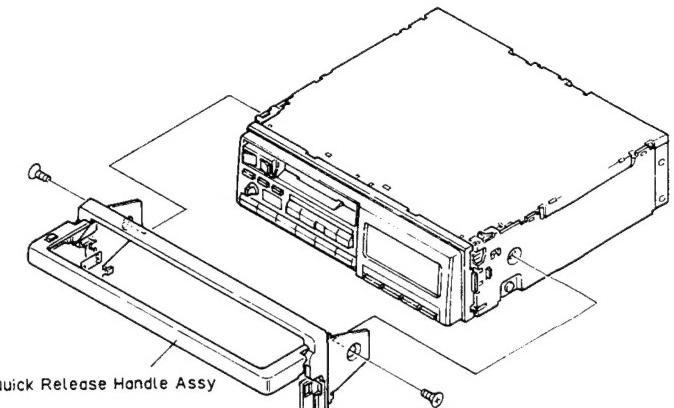


Fig. 1

• Removing the Case

1. Insert and turn a flat screwdriver to remove the case.
2. Raise the case to remove.

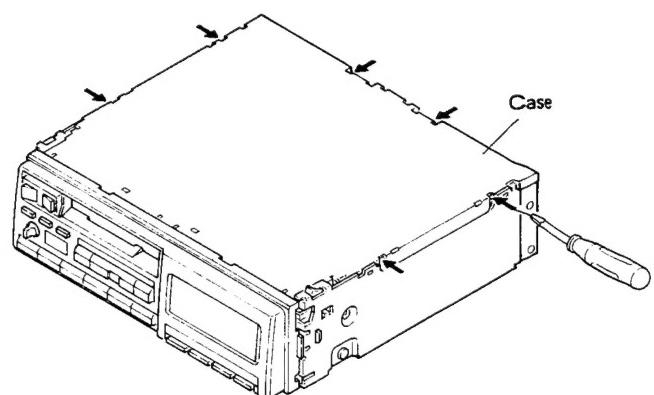


Fig. 2

• Removing the Cassette Mechanism Assy

1. Remove the four screws.
2. Disconnect the mechanism control unit connector.
3. Remove the cassette mechanism assy.

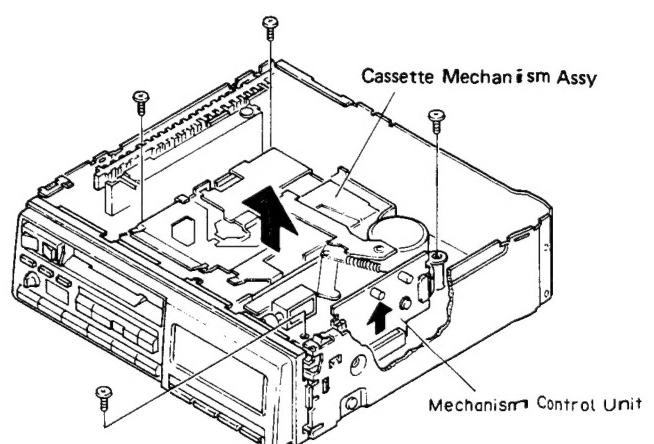


Fig. 3

• **Removing the Grille Assy**

1. Removing the knob.
2. Disconnect the two connectors.
3. Press the tabs at three locations, and then pull out the grille assy.

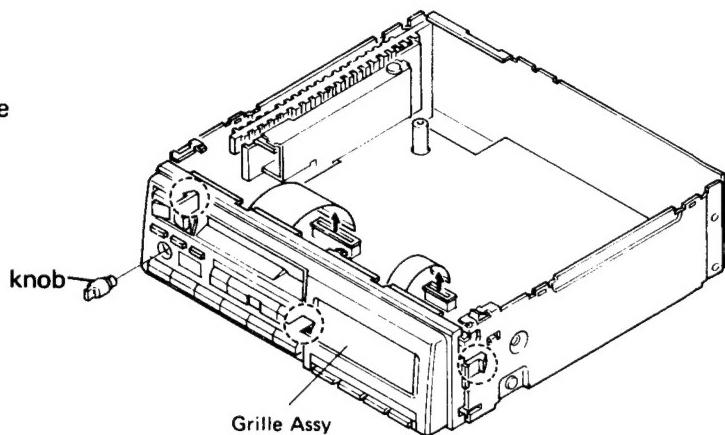


Fig. 4

• **Removing the Key Board Unit**

1. Removing the four screws.
2. Press the tabs at four locations indicated by arrows, and then pull out the key board unit.

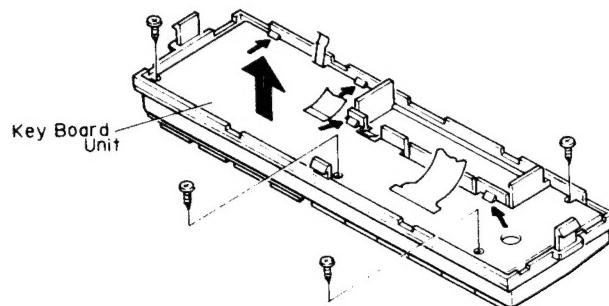


Fig. 5

• **Removing the Tuner Amp Unit**

1. Remove the two screws A, and then remove the cord assy.
2. Remove the battery case, and then remove the battery holder.
3. Remove the five screws.
4. Unbend the tabs at two locations indicated by arrows until straight.
5. Disconnect the connector.
6. Raise up on tuner amp unit to remove it from chassis unit.

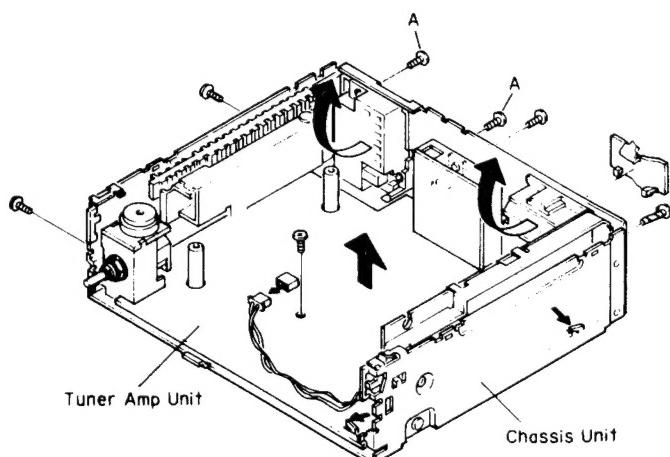


Fig. 6

7. BLOCK DIAGRAM

• KEH-8100B

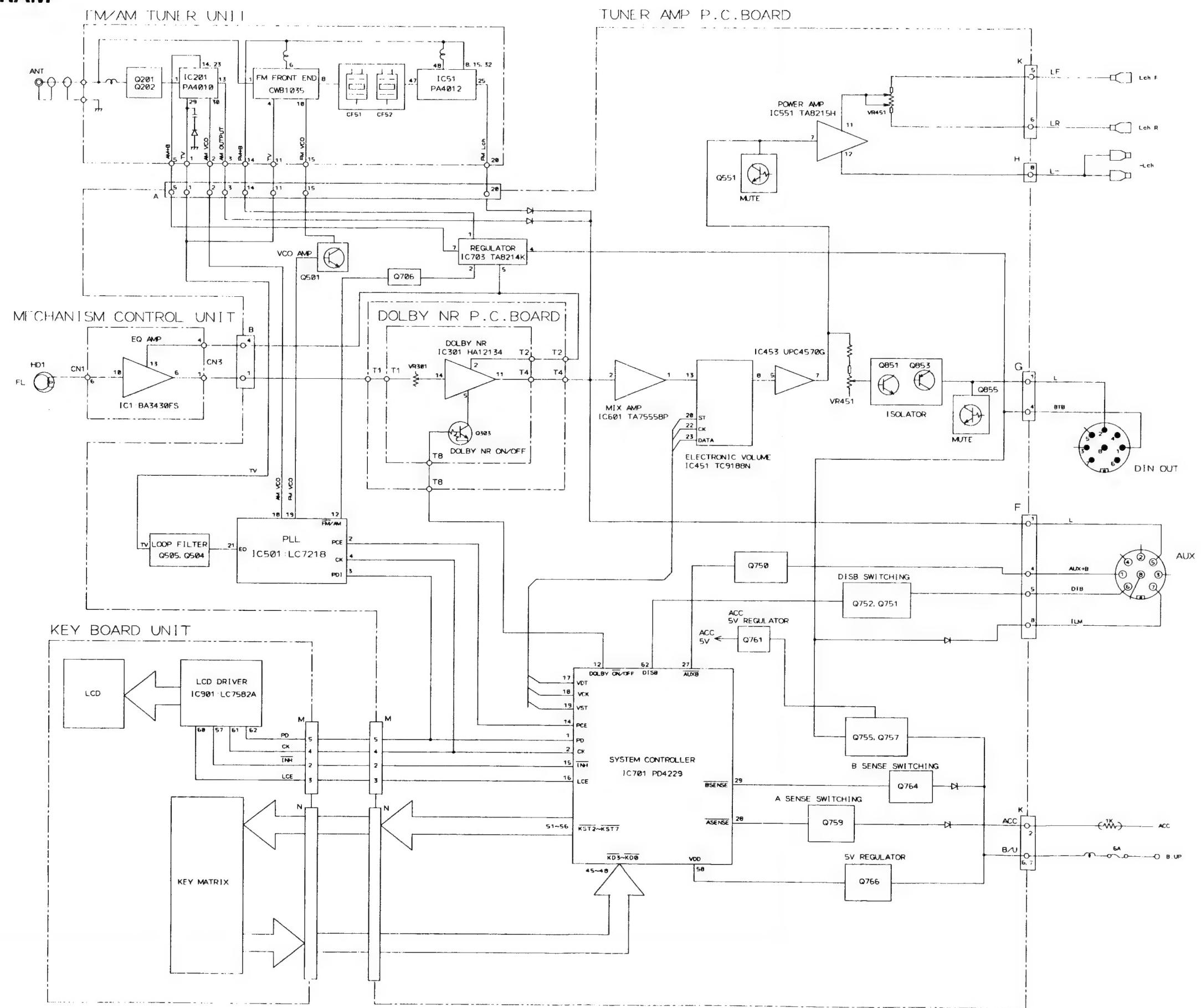


Fig. 7

8. ADJUSTMENT

NOTICE:

Select C1 so that total capacity of 80pF is attained from the direction of the receiver jack.
Z: Output impedance of SSG.

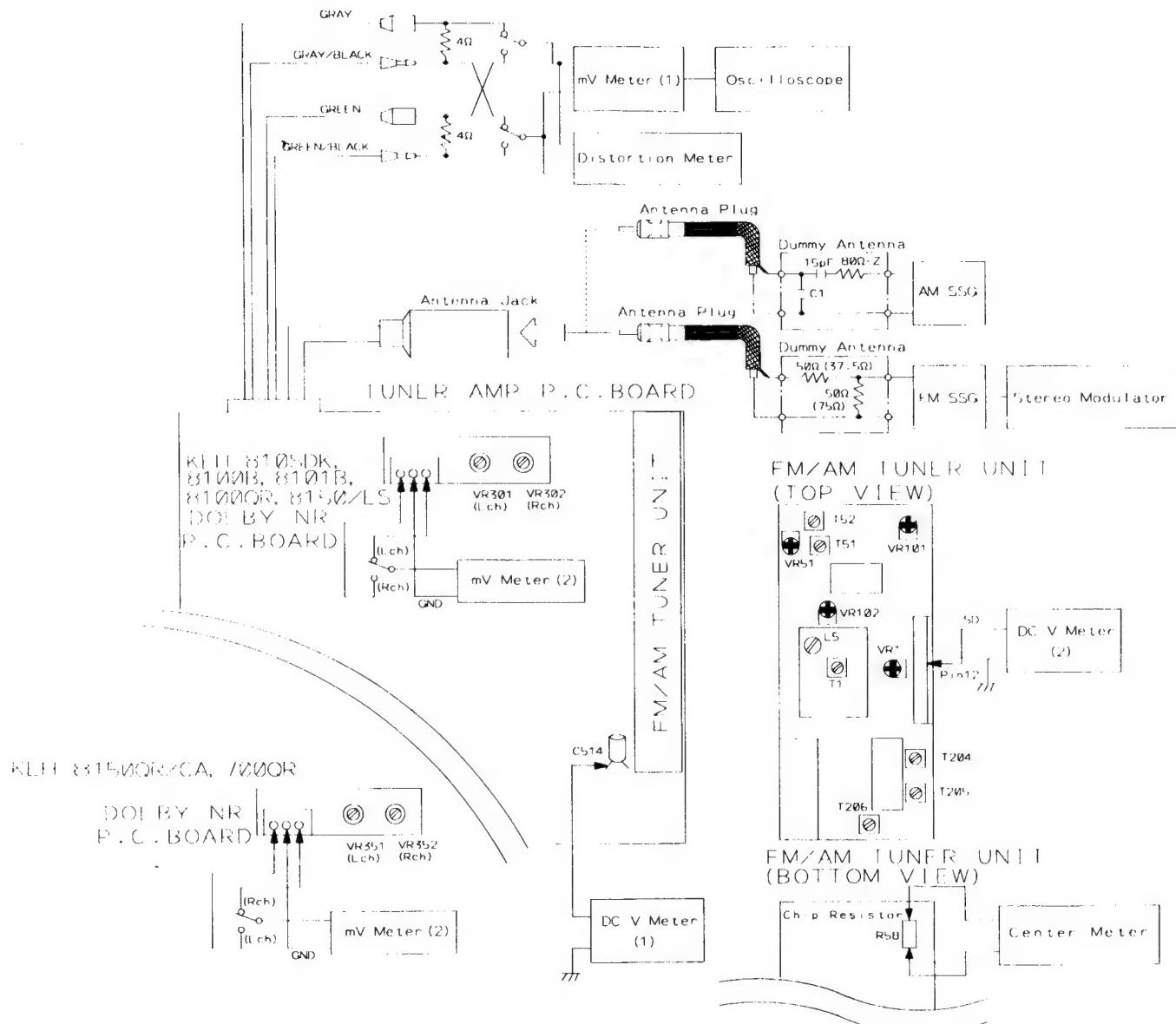


Fig. 8

MW/LW ADJUSTMENT (KEH-8100SDK, 8100B, 8101B)

	No.	AM SSG (400Hz, 30%)		Displayed Frequency (kHz)	Adjusting Point	Adjustment Method (Switch Position)
		Frequency (kHz)	Level (dB μ V)			
Tun-ing Volt	1	(MW MODE)		1,602	—	Verify that DC V Meter (1) is less than 6.5V.
	2	(LW MODE)		153	—	Verify that DC V Meter (1) is more than 2.0V.
IF	1	999	20-25	999	T204, 205, 206	mV Meter (1): Maximum

AM ADJUSTMENT (KEH-8100QR, 8150QR, 700QR)

*:ES model when tuning step at 9kHz.

	No.	AM SSG (400Hz, 30%)		Displayed Frequency (kHz)	Adjusting Point	Adjustment Method (Switch Position)
		Frequency (kHz)	Level (dB μ V)			
Tun-ing Volt	1			1,710 *(1,602)	—	Verify that DC V Meter (1) is less than 6.5V.
	2			530 *(531)	—	Verify that DC V Meter (1) is more than 2.0V.
IF	1	1,000 *(999)	20-25	1,000 *(999)	T204, 205, 206	mV Meter (1): Maximum

DOLBY NR ADJUSTMENT

(KEH-8100SDK, 8100B, 8101B, 8100QR, 8150/ES)

No.	Cassette Tape	Adjusting Point	Adjustment Method (Switch Position)
1	NCT-150 (400Hz, 200nwb/m)	VR301(Lch) VR302(Rch)	mV Meter (2): -7.2dBs (337mV) (DOLBY NR Switch: OFF) (METAL Switch: OFF)

DOLBY NR ADJUSTMENT
(KEH-8150QR/CA, 700QR)

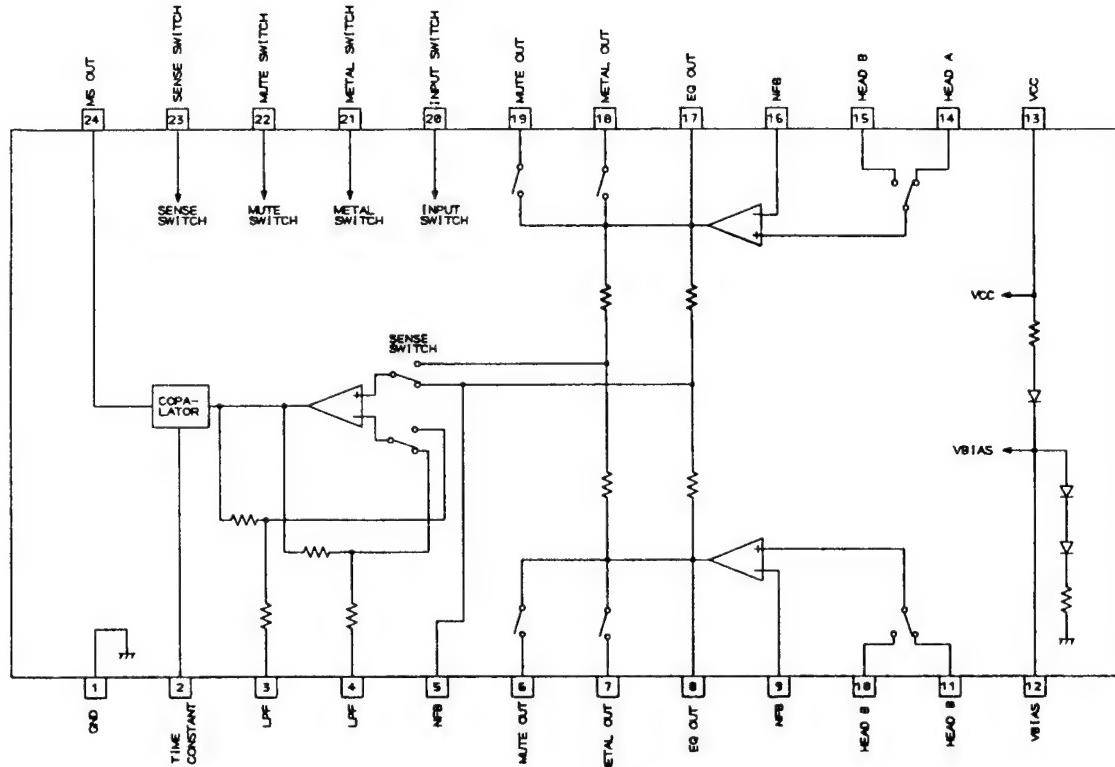
No.	Cassette Tape	Adjusting Point	Adjustment Method (Switch Position)
1	NCT-150 (400Hz, 200nwb/m)	VR351(Lch) VR352(Rch)	mV Meter(2): -10dBs +1.5, -0.5 (DOLBY NR Switch:OFF) (METAL Switch:OFF)

FM ADJUSTMENT * Stereo MOD.: 1kHz, L+R=90% , Pilot=10%
*:US and CA model

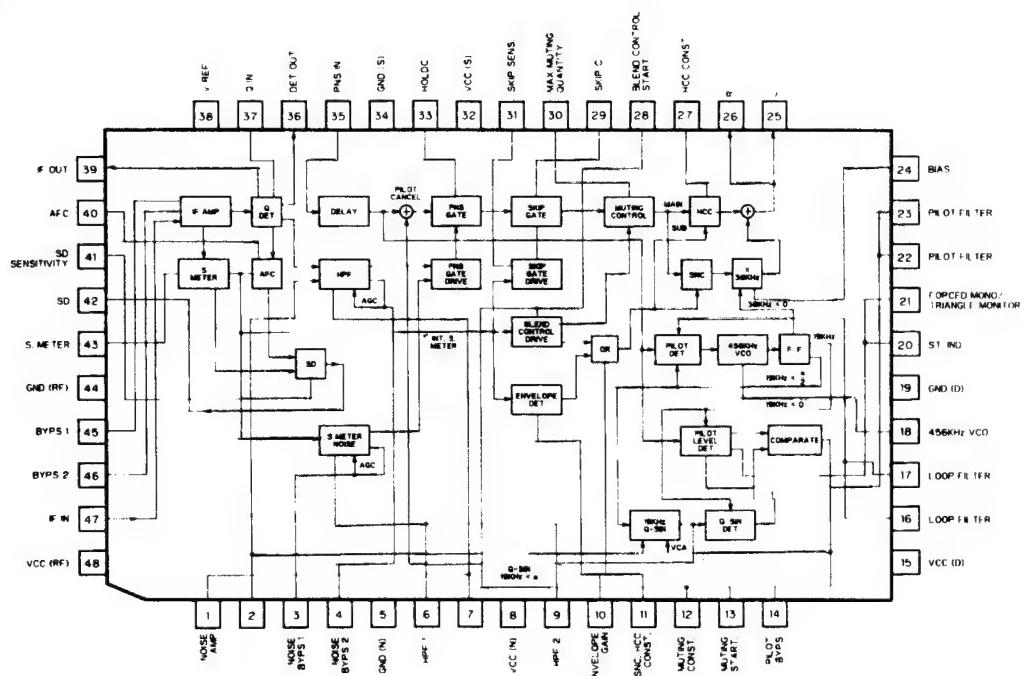
No.	FM SSG(400Hz, 100%)		Displayed Frequency (MHz)	Adjusting Point	Adjustment Method (Switch Position)
	Frequency (MHz)	Level (dB μ V)			
IF	1	98.1	60	98.1	T51 Center Meter:0
	2	98.1	60	98.1	Distortion Meter:Minimum
	3	Repeat No.1-2 alternately so that the center meter indicates the 0 output and distortion meter indicates minimum output.			
Front End	1		108.0 *(107.9)	L5	DC V Meter(1):6.2±0.2V
	2		87.5 *(87.9)	—	Verify that DC V Meter(1) is more than 2.1±0.6V
	3	98.1	8	98.1	T1 Distortion Meter:Minimum
Soft Mute	1	98.1	60	98.1	— mV Meter(1):A dB
	2	98.1	10	98.1	VR102 mV Meter(1):A-3dB
ARC	1	98.1*	35	98.1	VR101 mV Meter(1):Separation 5dB
SD	1	98.1	17	98.1	VR51 DC V Meter(2):Apprx. 5V
	2	98.1	16	98.1	— Verify that DC V Meter(2) is approx. 0V.
	3	98.1	55	98.1	VR1 DC V Meter(2):Apprx. 5V
	4	98.1	54	98.1	— Verify that DC V Meter(2) is approx. 0V.

● ICs

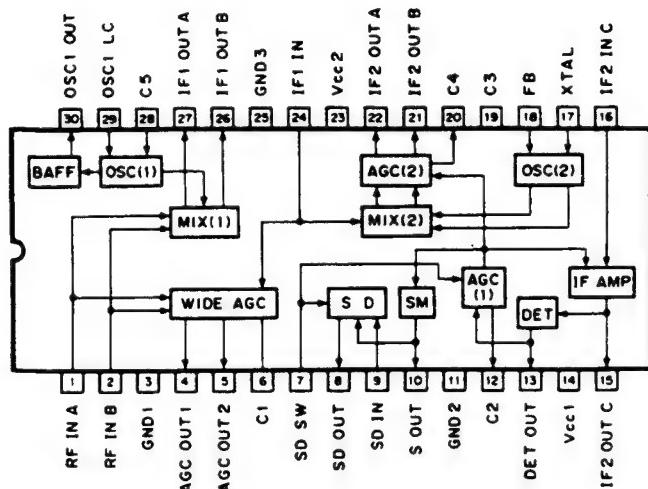
IC1:BA3430FS



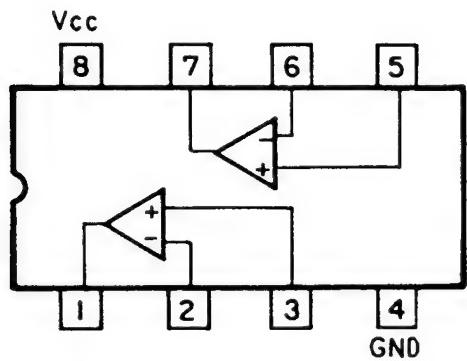
IC51:PA4012



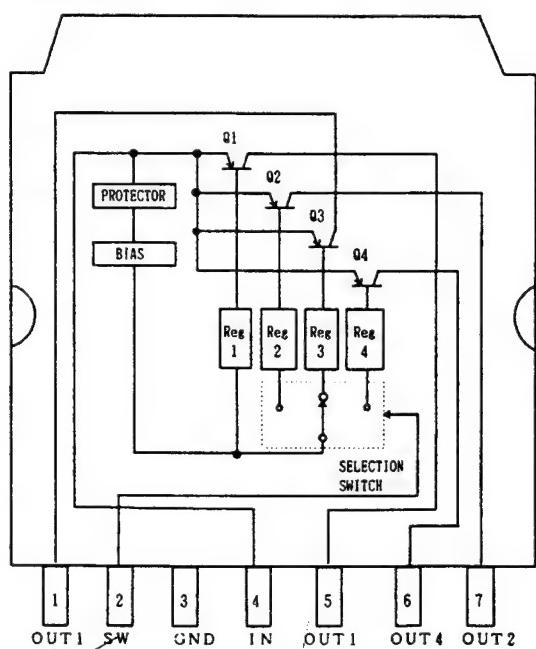
IC201:PA4010



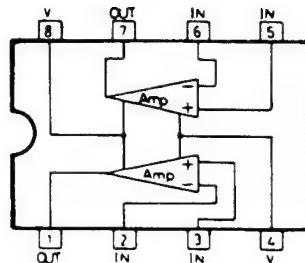
IC452~454:UPC4570G



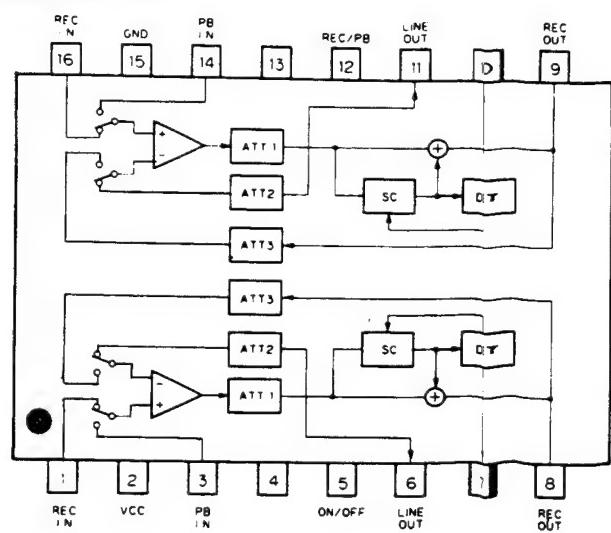
IC703:TA8214K



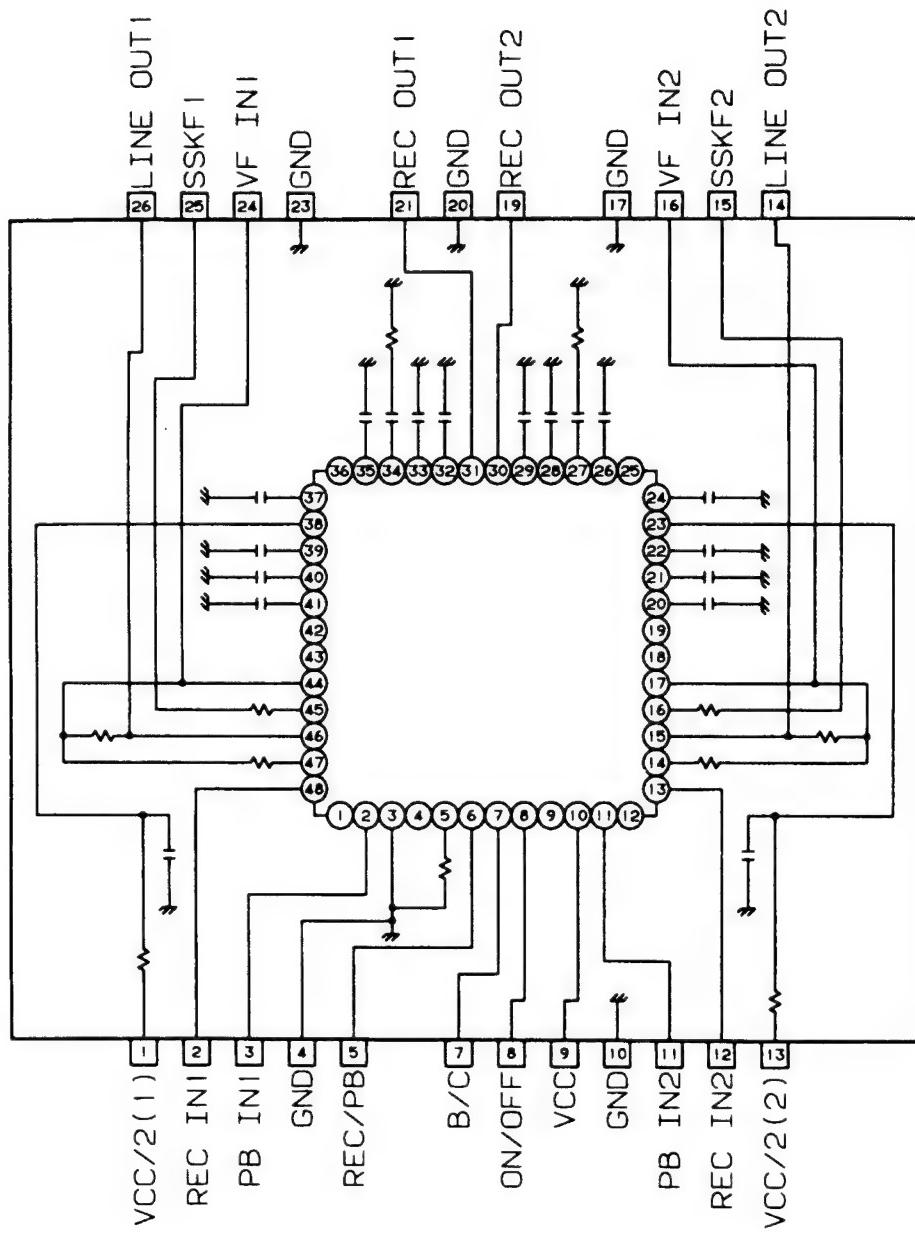
IC601:TA75558P



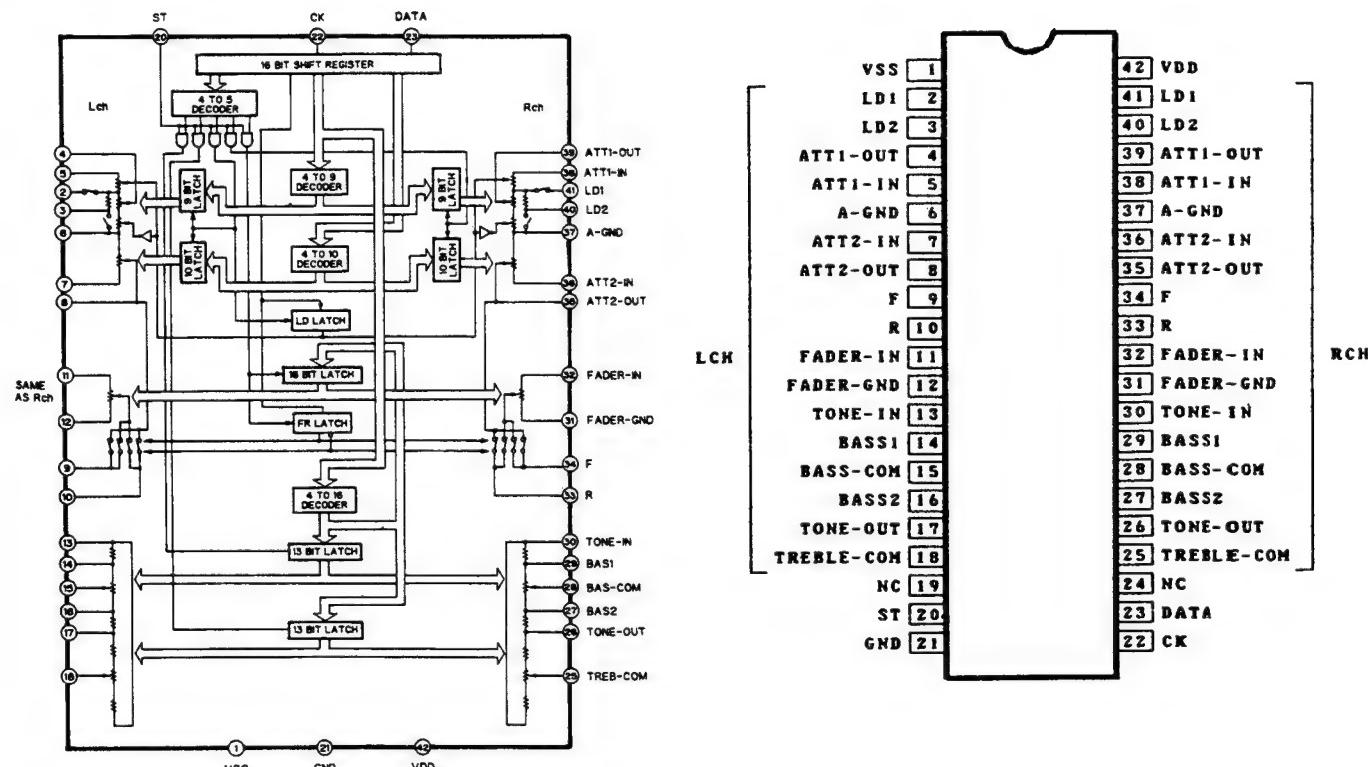
IC301:HA12134



IC351 : BH-2405



IC451 : TC9188N

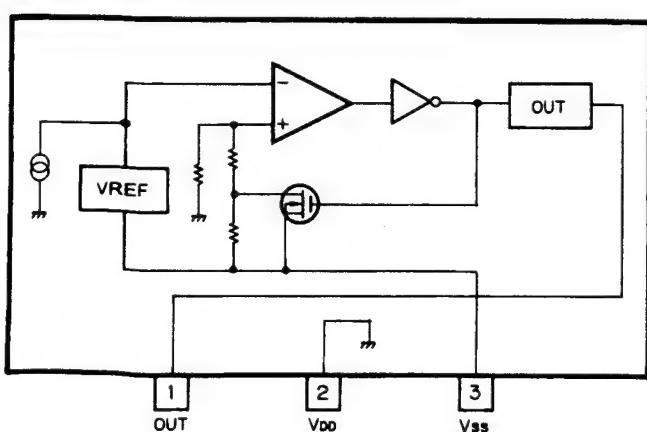


● Pin Functions (TC9188N)

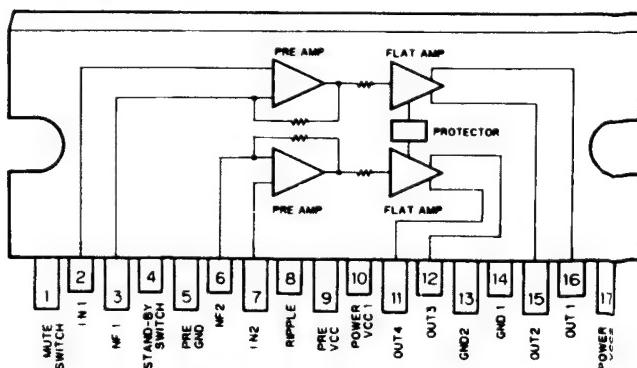
Pin No.	Pin Name	I/O	Function and Operation
2	(L)		Loudness network connection terminals.
3	LD1, LD2		
40	(R)		
41			
4	(L) ATT1-OUT (R)	Output	10dB step attenuator output terminals. The signal applied to ATT1-IN will be attenuated at eight levels from 0 to -70dB, in 10dB steps.
39			
5	(L) ATT1-IN (R)	Input	10dB step attenuator input terminals.
38			
6	(L) A-GND (R)		Analog GND terminals.
37			
7	(L) ATT2-IN (R)	Input	1dB step attenuator input terminals.
36			
8	(L) ATT2-OUT (R)	Output	1dB step attenuator output terminals. The signal applied to ATT2-IN will be attenuated at ten levels from 0 to -9dB, in 1dB steps.
35			
9	(L) F (R)	Output	Fader control: front output terminals.
34			
10	(L) R (R)	Output	Fader control: rear output terminals.
33			
11	(L) FADER-IN (R)	Input	Fader control input terminals.
32			

Pin No.	Pin Name	I/O	Function and Operation
12 31	(L) FADER—GND (R)		Attenuator GND terminals for fader control.
13 30	(L) TONE—IN (R)	Input	Tone control input terminals.
14 29	(L) BASS 1 (R)		Tap terminals for bass tone control.
15 28	(L) BASS—COM (R)		Common terminals for bass tone control volume.
16 27	(L) BASS 2 (R)		Tap terminals for bass tone control.
17 26	(L) TONE—OUT (R)	Output	Tone control output terminals.
18 25	(L) TREBLE—COM (R)		Common terminals for treble tone control volume.
19 24	NC NC		Use Open or GND.
20	ST	Input	Strobing input terminal to switch over to the obtained control data. This is a low threshold inverter input, the same as the CK and DATA inputs.
22	CK	Input	Clock input terminal to read control data.
23	DATA	Input	Input terminal for control data.
1 21 42	VSS GND VDD		Power supply terminals.

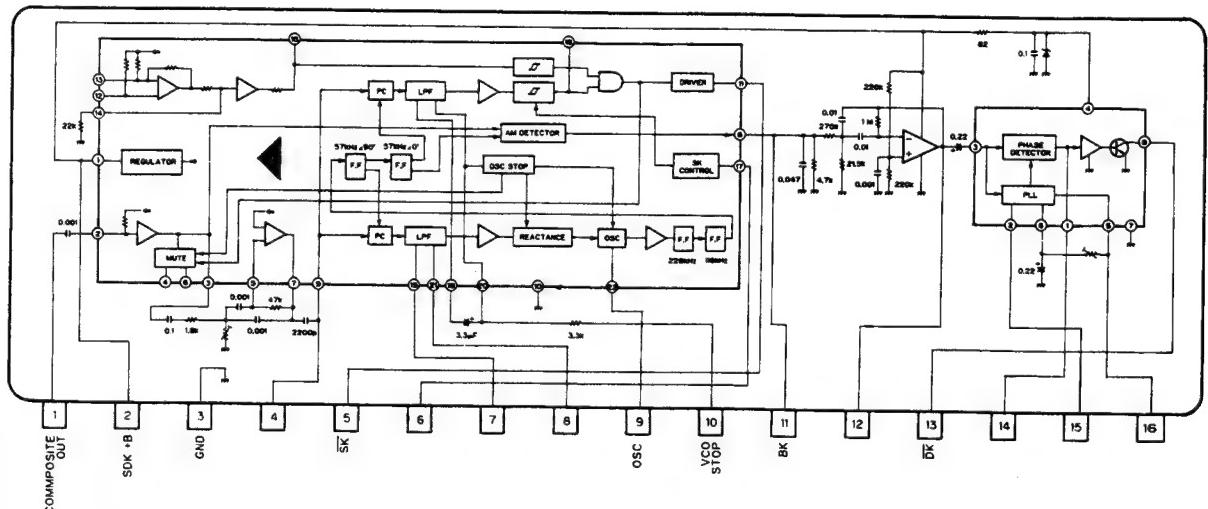
IC702 : S-8053ANO



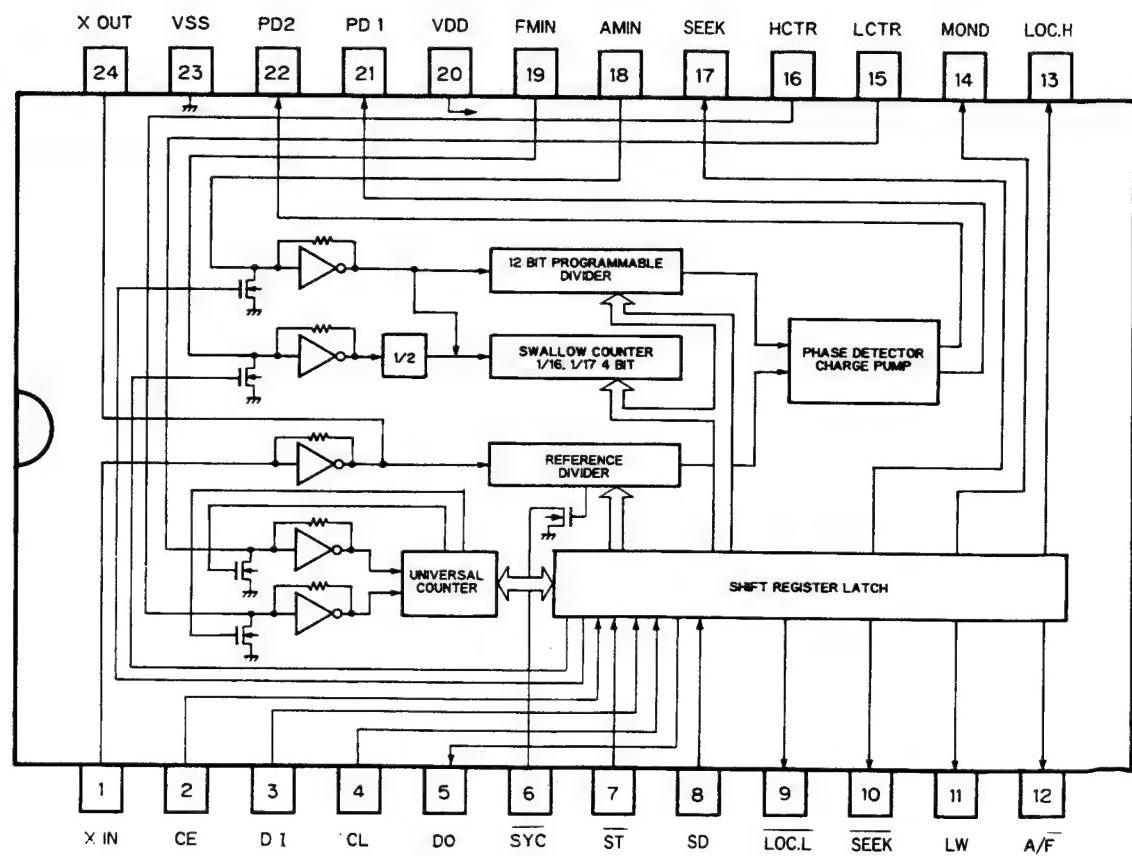
IC551 : TA8215H



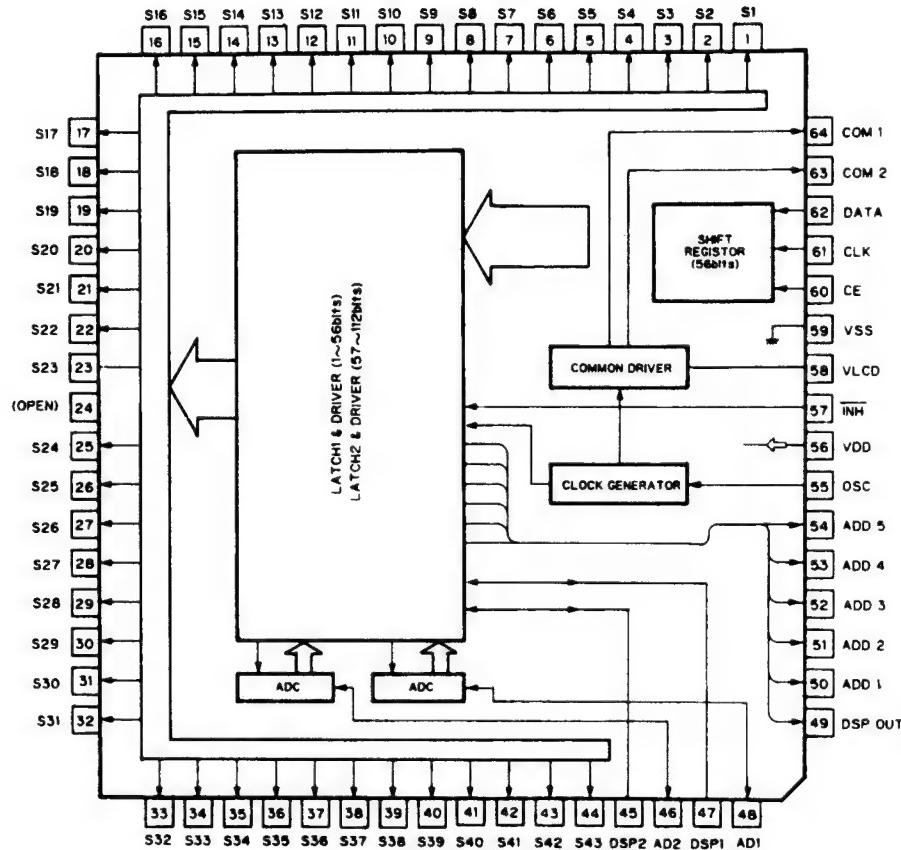
IC502 : KHA142



IC501:LC7218



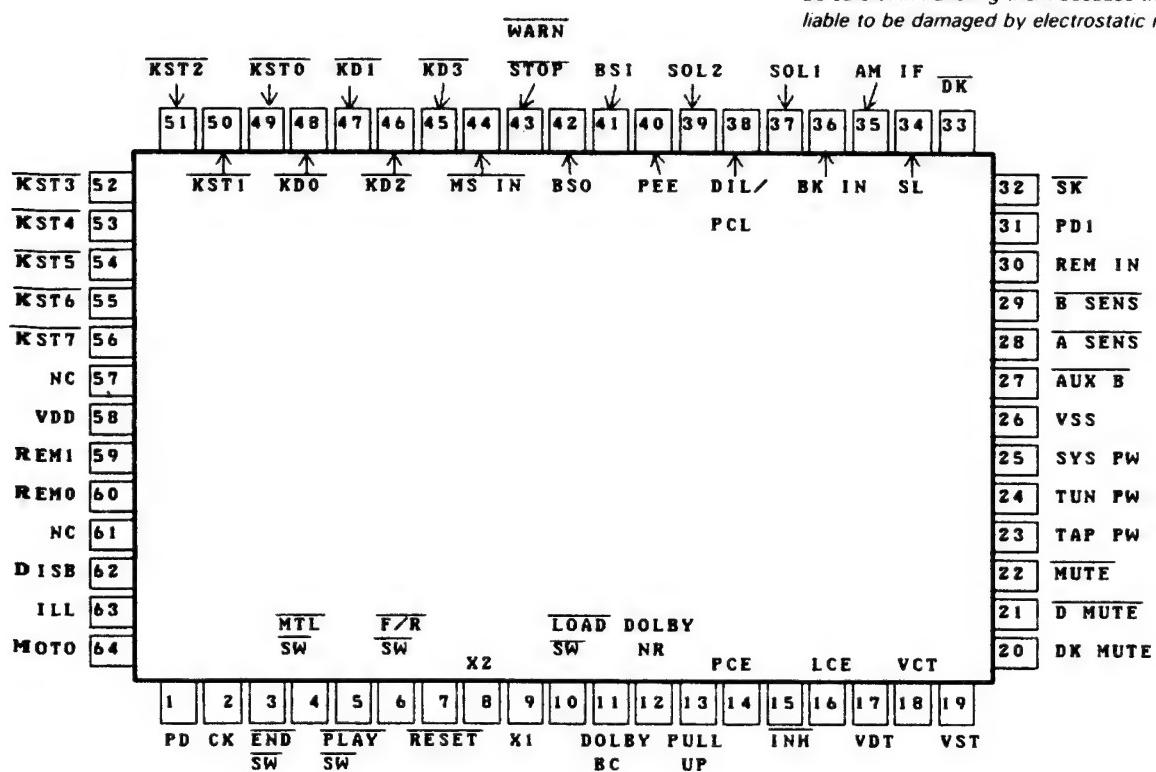
IC901:LC7582A



IC701 : *PD4229

IC's marked by * are MOS type.

Be careful in handling them because they are very liable to be damaged by electrostatic induction.



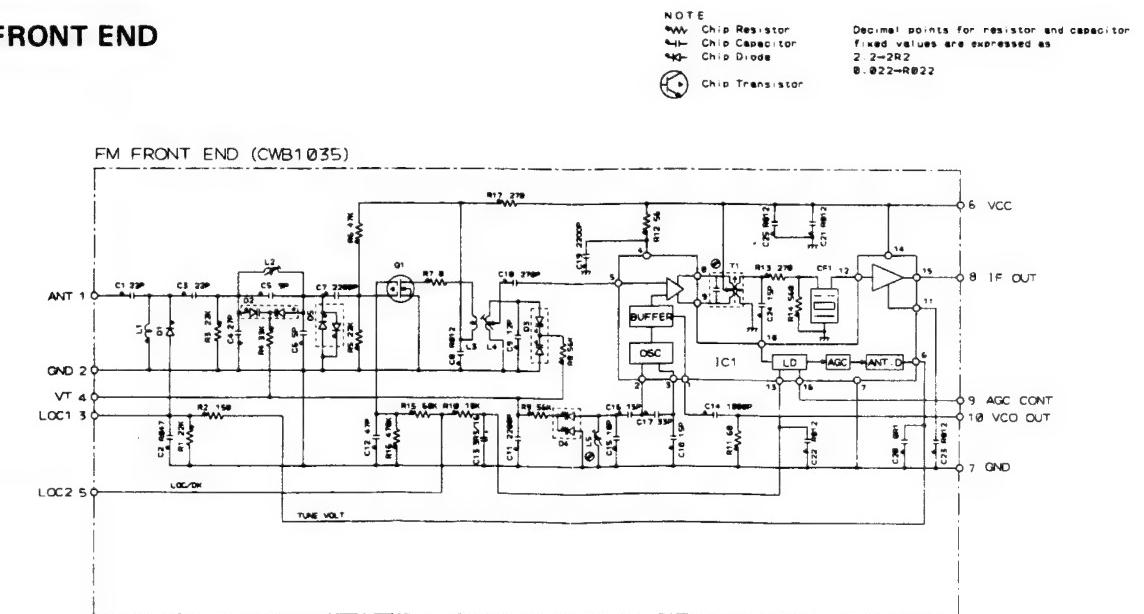
● Pin Functions (PD4229)

Pin No.	Pin Name	I/O	Output Format	Function and Operation	STBY	RST
1	PD	Output	C	LCD driver IC and PLL IC data line	L	Hi-Z
2	CK	Output	C	LCD driver IC and PLL IC clock line	L	Hi-Z
3	END SW	Input		Deck END sensor input		
4	MTL SW	Input		Deck METAL(70 μS) sensor input		
5	PLAY SW	Input		Deck head position(PLAY) sensor input		
6	F/R SW	Input		Deck FWD/REV sensor input		
7	RESET	Input		Reset input		
8	X2			Crystal oscillating element connection pin		
9	X1			Crystal oscillating element connection pin		
10	LOAD SW	Input		Deck LOAD/EJECT sensor input		
11	DOLBYB/C	Output	C	Dolby NR B/C selector output	L	Hi-Z
12	NR	Output	C	Dolby NR ON/OFF output	L	Hi-Z
13	PULL UP	Output	C	Cut pull up for deck switches when BACK UP is OFF	Hi-Z	
14	PCE	Output	C	Chip enable output for PLL IC (IC501:LC7218)	L	Hi-Z
15	INH	Output	C	INH control output for LCD driver IC(IC901:LC7582A)	L	Hi-Z
16	LCE	Output	C	Chip enable or strobe output for LCD driver IC	L	Hi-Z
17	VDT	Output	C	Data output for electronic volume IC(IC451:TC9188N)	L	Hi-Z
18	VCK	Output	C	Clock output for electronic volume IC(IC451:TC9188N)	L	Hi-Z
19	VST	Output	C	Strobe output for electronic volume IC(IC451:TC9188N)	L	Hi-Z
20	DK MUTE	Output	C	Tuner mute output	H	Hi-Z
21	D MUTE	Output	C	Deck mute output	H	Hi-Z
22	MUTE	Output	C	System mute output	H	Hi-Z
23	TAP PW	Output	C	Deck power supply control	L	Hi-Z
24	TUN PW	Output	C	Tuner power supply control	L	Hi-Z
25	SYS PW	Output	C	System(power amp)power supply control	L	Hi-Z
26	VSS			GND		
27	AUX B	Input		AUX B sensor input		
28	A SENS	Input		ACC power supply sensor input		
29	B SENS	Input		BACK UP power supply sensor input		
30	REM IN	Input		Remote control pulse input		
31	PDI	Input		Data input for PLL IC (IC501:LC7218)	L	Hi-Z
32	SK	Input		SK signal input		
33	DK	Input		DK signal input		
34	SL	Input		Input level sensor input		
35	AM IF	Input		AM IF count input		
36	BK IN			Not used		
37	SOL 1	Output	C	Output for deck solenoid 1 (head position)	Keep	Hi-Z
38	DIL/PCL	Output	C	Deck FWD/REV head selector output		
39	SOL 2	Output	C	Output for deck solenoid 2 (DIR selector and EJECT)	L	Hi-Z
40	PEE	Output	C	Beep tone output	L	Hi-Z

Pin No.	Pin Name	I/O	Output Format	Function and Operation	STBY	RST
41	BSI	Input		Bus serial data input		
42	BSO	Output	C	Bus serial data output		
43	WARNSTOP	Input		Quick release warning stop input		
44	MS IN	Input		Music signal input		
45-48	KD3-KDO	Input		Key return input		
49	KST0	Output	NM	Model sense strobe output	Hi-Z	Hi-Z
50	KST1	Output	NM	Model sense strobe output	Hi-Z	Hi-Z
51-56	KST2-KST7	Output	NM	Key strobe output		
57	NC					
58	VDD					
59	REM1	Output	C	AUX remote control data output 1		
60	REM0	Output	C	AUX remote control data output 2		
61	NC					
62	DISB	Output	C	DISB control output	L	Hi-Z
63	ILL	Output	C	Illumination green/amber selector output	Keep	Hi-Z
64	MOTO	Output	C	Deck main motor control output	L	Hi-Z

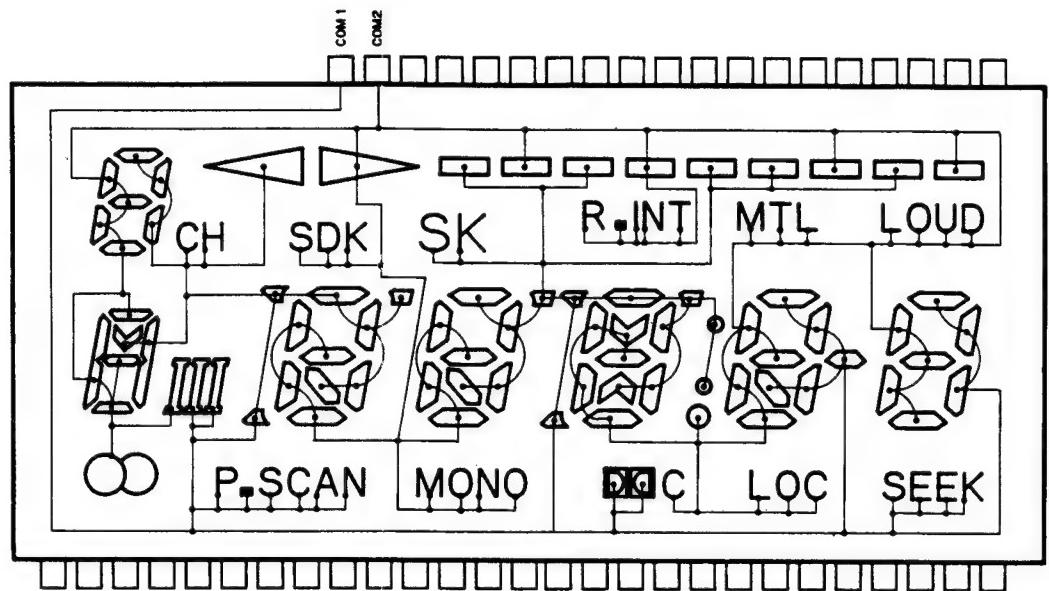
Output Format	Meaning
C	CMOS Output
NM	Neutral resistivity N channel open drain

● FM FRONT END

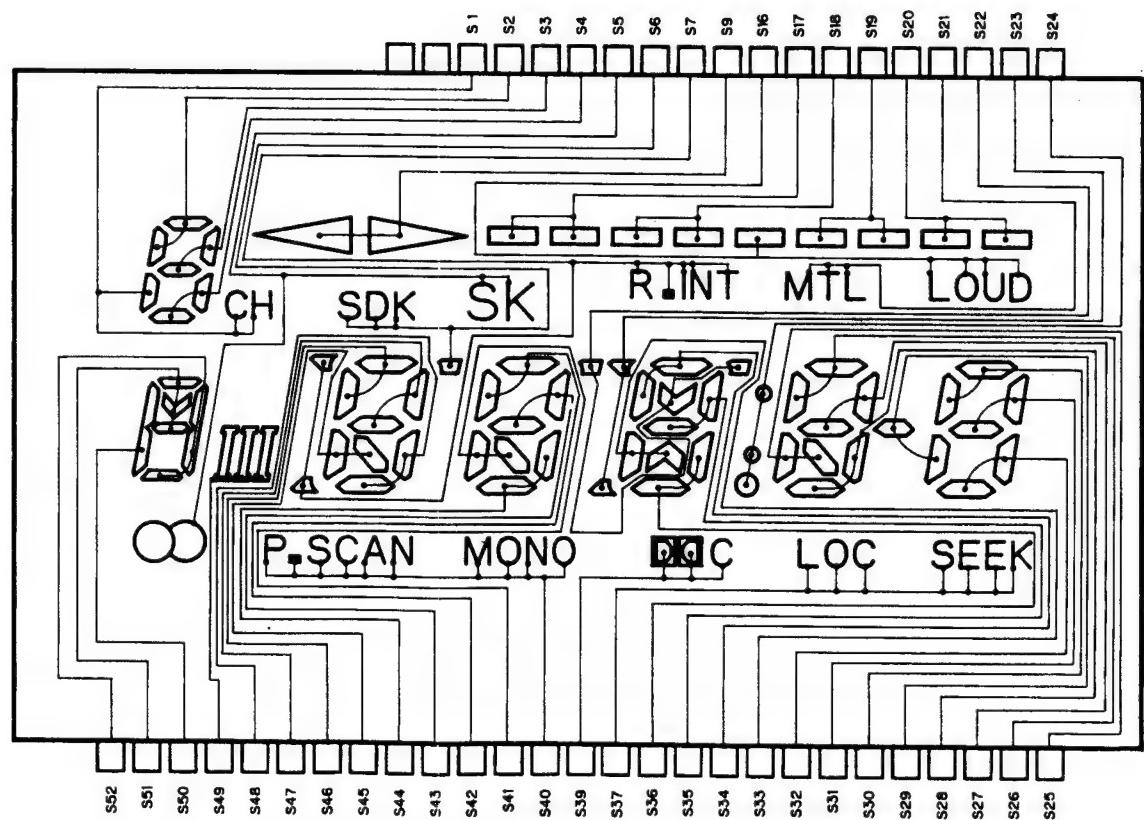


KEH-B100OSDK

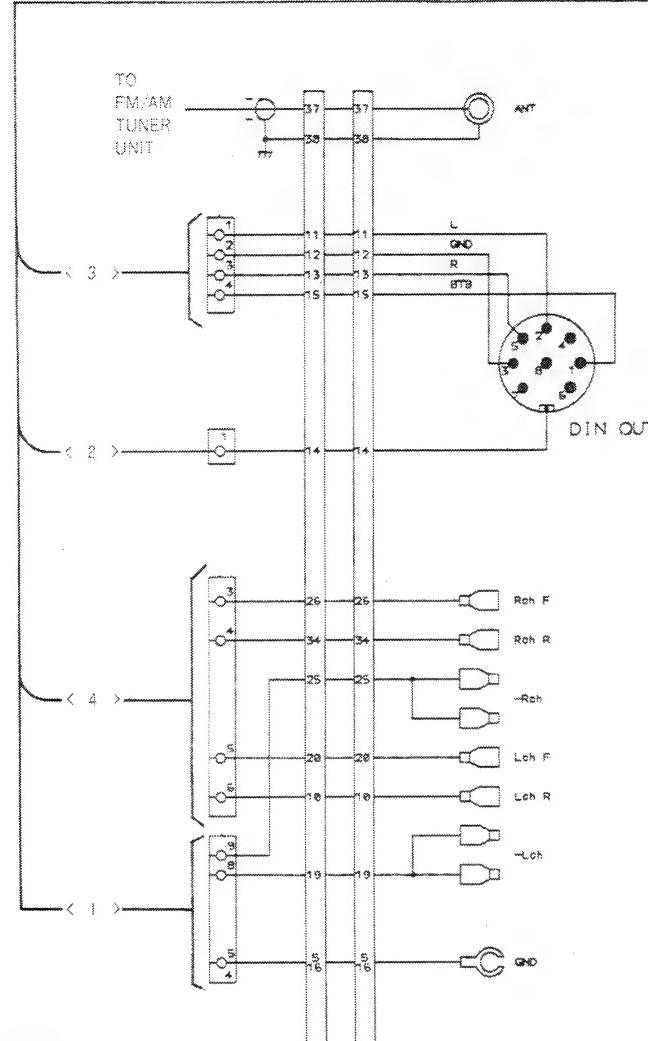
- LCD (CAW1070)
COMMON



SEGMENT



9. CONNECTION DIAGRAM (KEH-8100SDK)



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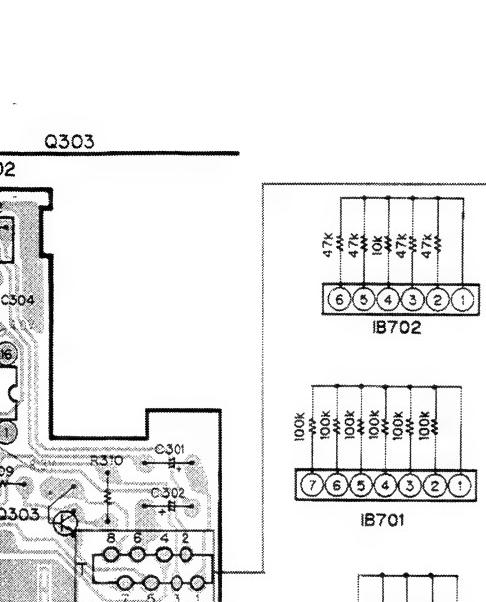
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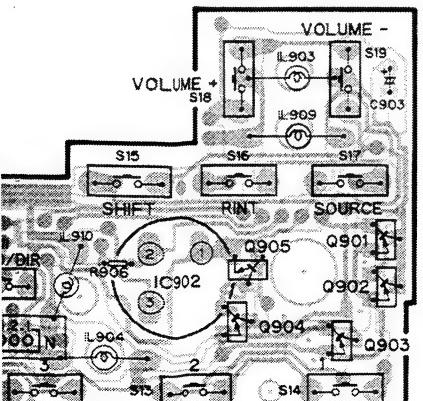
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TUNER AMP P.C. BOARD

Q508 Q606 Q602
 Q506 Q507 Q505 Q504 Q604 Q605 Q608 IC451 Q603 Q764
 IC, Q Q509 Q510 Q501 Q503 IC501 Q502 Q601 Q607 IC601 IC701 IC452 Q701 Q611 Q750 IC703 Q763 Q801 Q761 Q854 Q705 Q802 Q857 IC551
 ADJ

TO FM/AM TUNER
UNITTO CASSETTE
MECHANISM SECTION

Q905 IC902 Q904 Q903 Q902



PEE P.C. BOARD

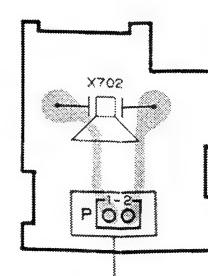


Fig. 9

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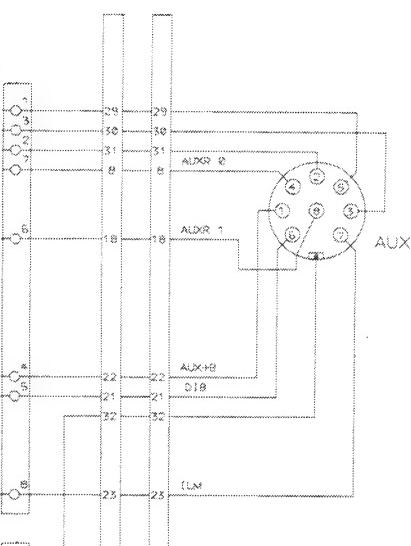
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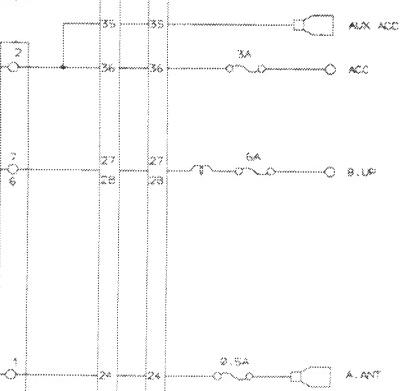
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BATTERY

A



B



C

D

1

2

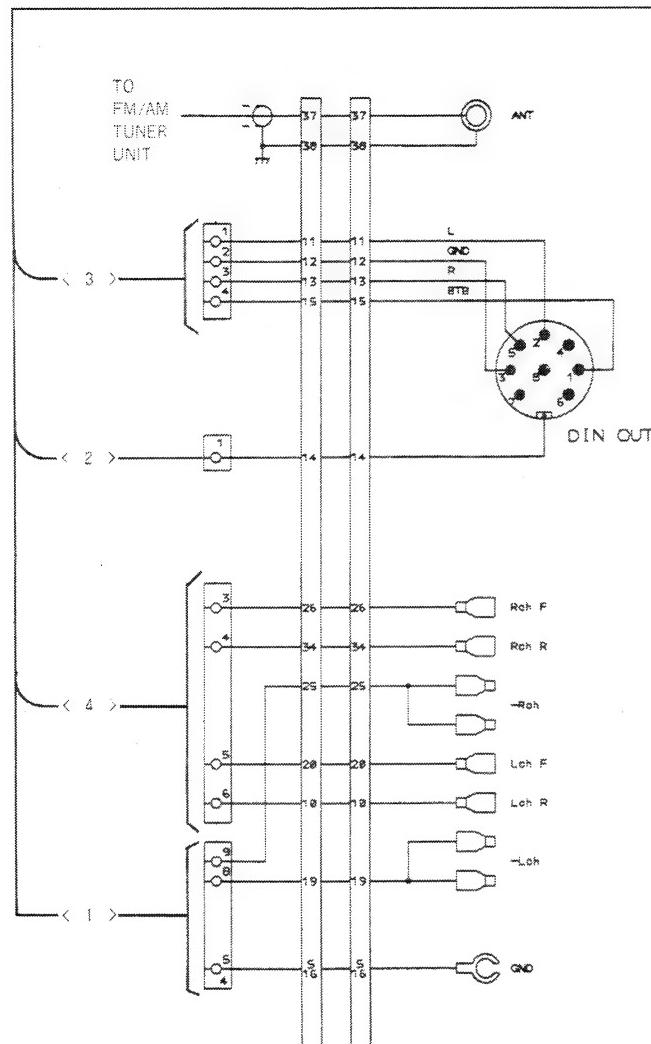
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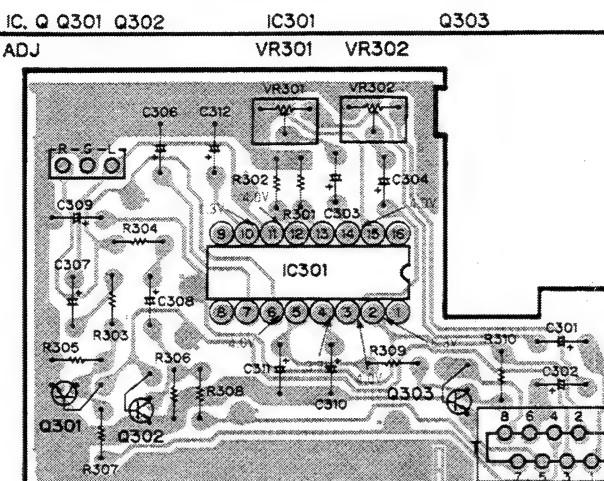
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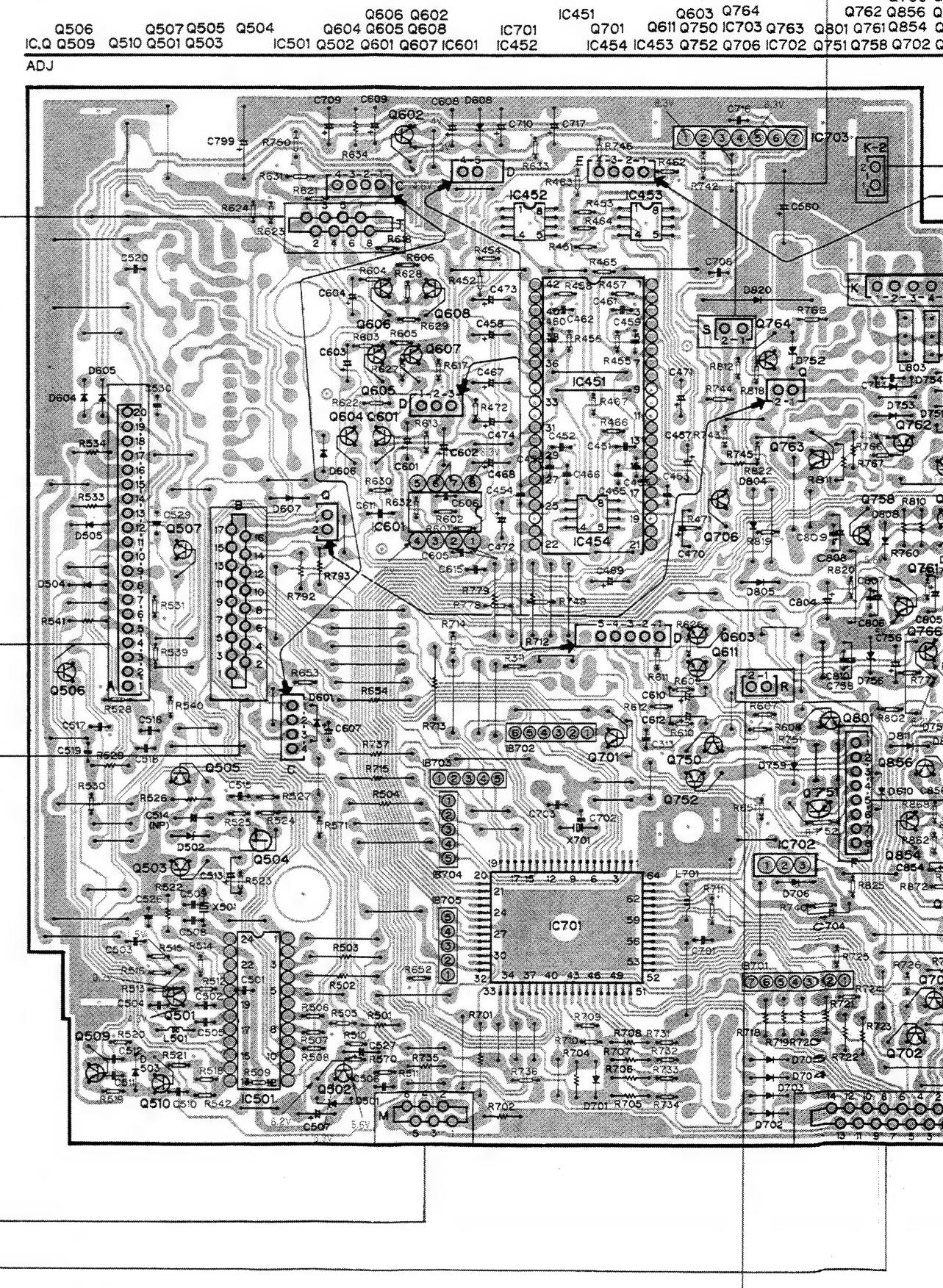
12. CONNECTION DIAGRAM (KEH-8100B, I)



DOLBY NR P.C.BOARD



TUNER P.C.BOARD

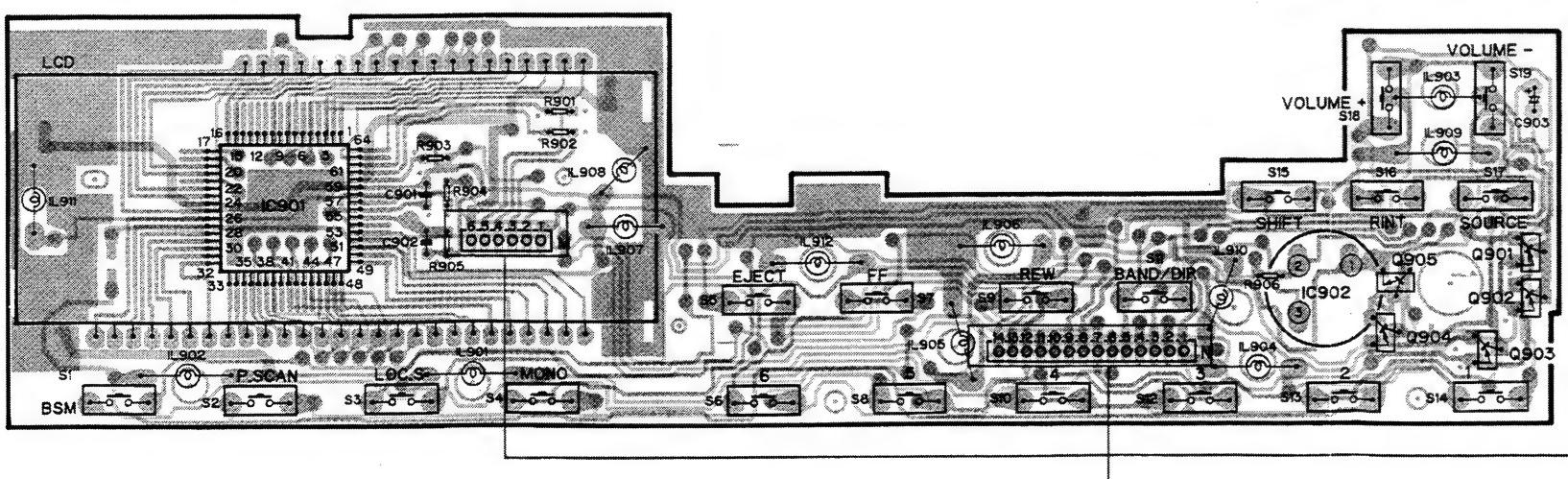


A

B

C KEYBOARD UNIT

[6301]



1

4

5

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7

8

TUNER P.C.BOARD

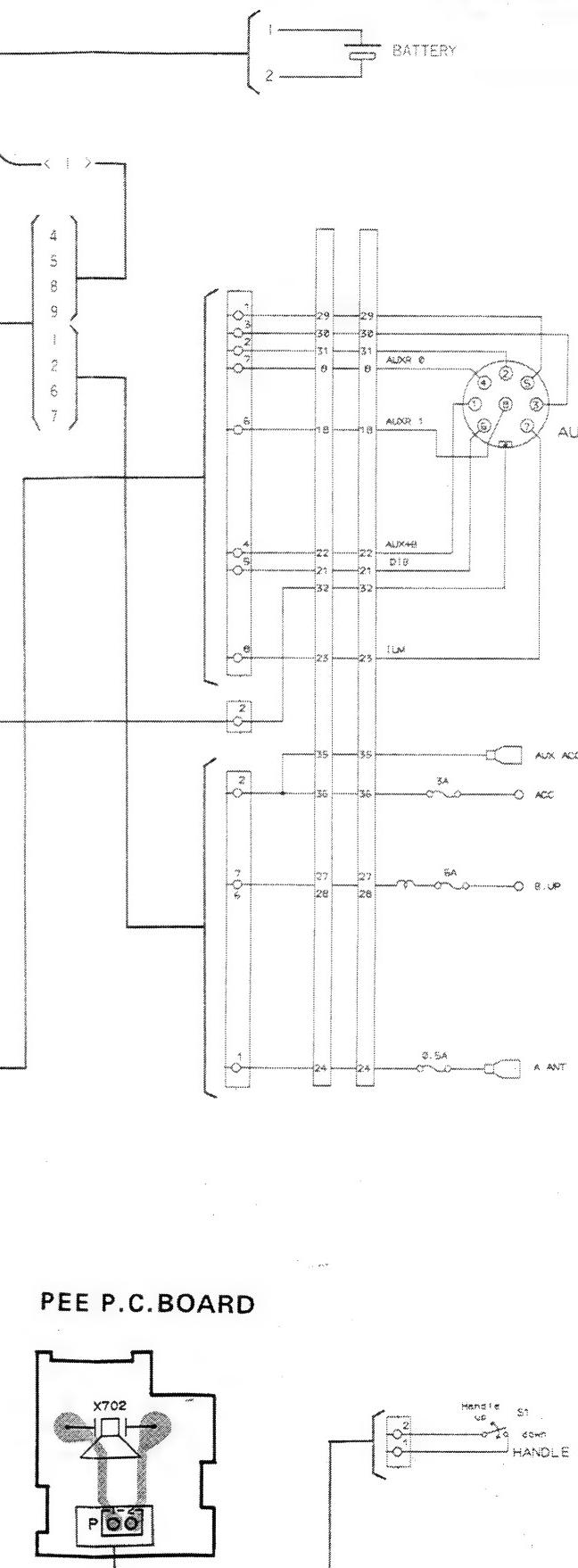
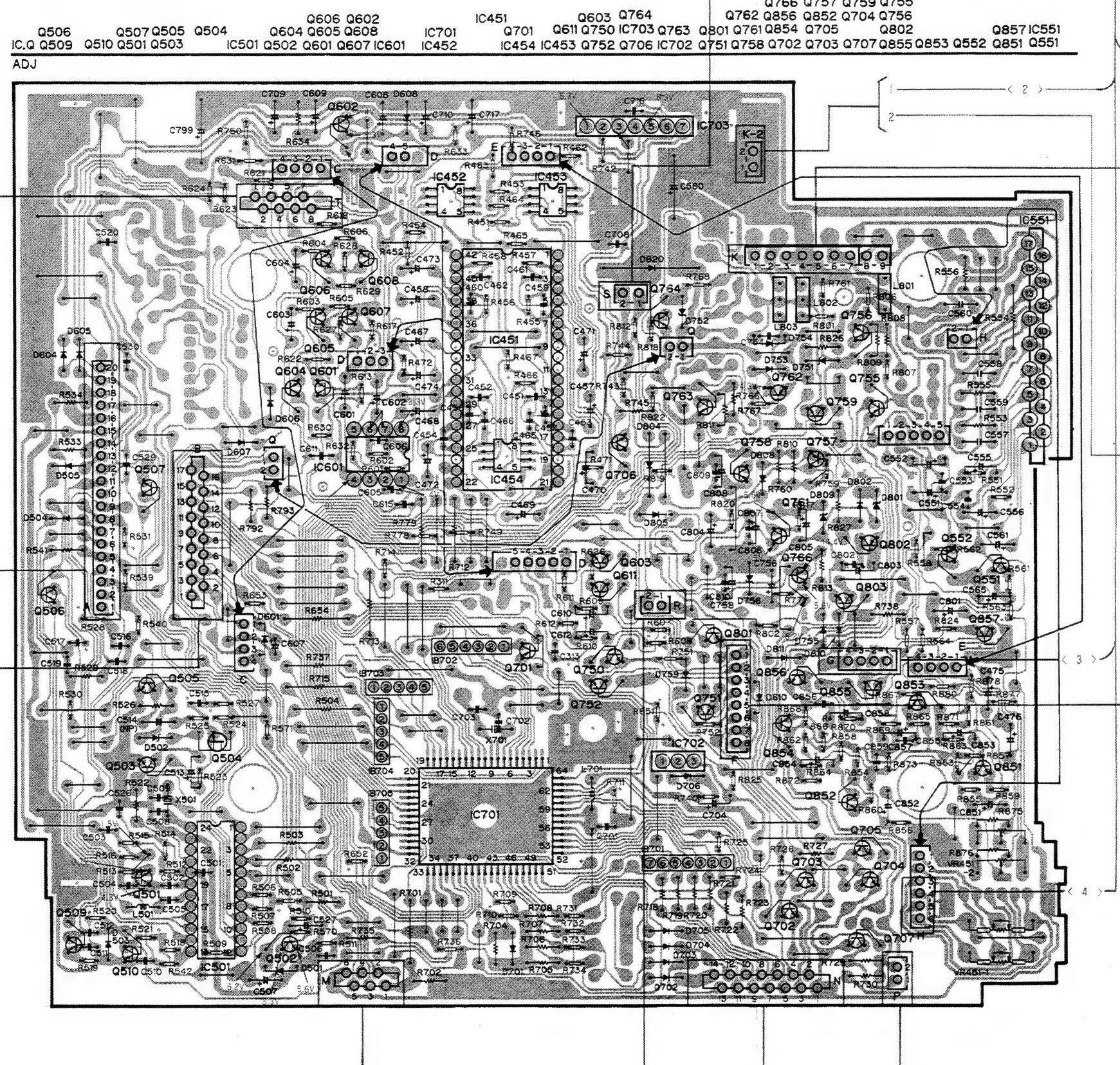


Fig. 12

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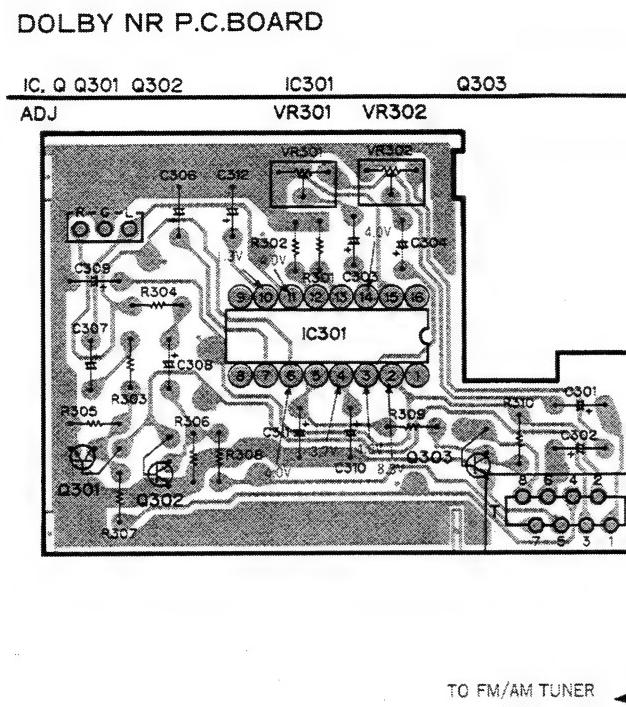
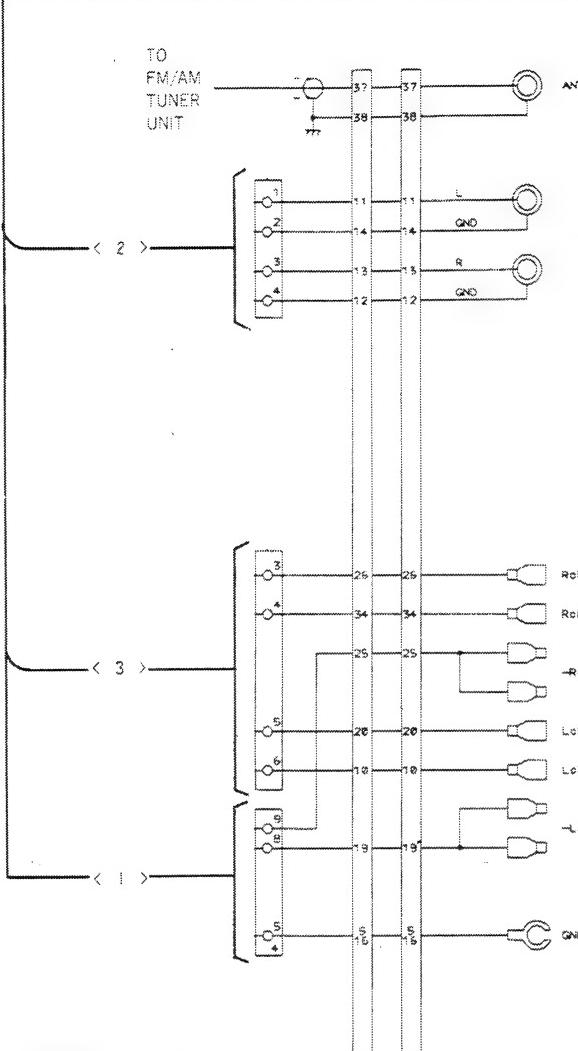
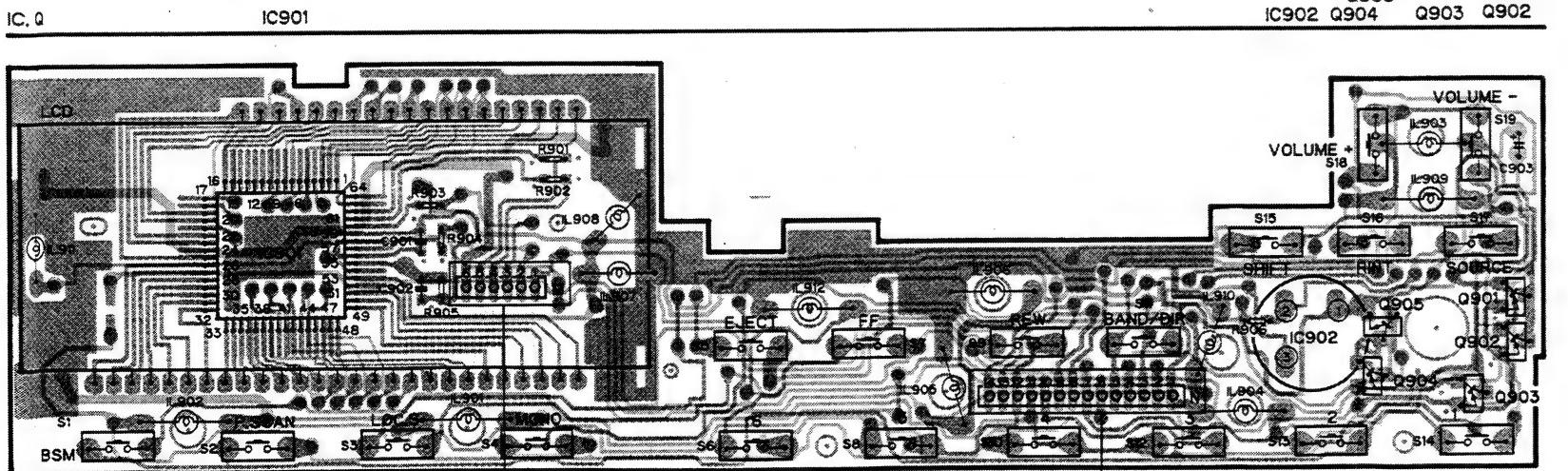
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13. CONNECTION DIAGRAM (KEH-8100QR)

**KEY BOARD UNIT****TUNER AMP P.C. BOARD**

Q506	Q507	Q505	Q504	Q606	Q602	Q766	Q757
IC. Q Q509	Q510	Q501	Q604	Q605	Q608	Q762	Q856

IC501	Q502	Q601	Q607	IC601	IC701	Q603	Q764
IC454	IC453	Q752	Q706	IC702	Q751	Q758	Q702

IC452	IC451	Q701	Q611	Q750	IC703	Q763	Q801
IC455	IC453	Q764	Q750	Q763	Q761	Q854	Q705

IC456	IC455	Q764	Q750	Q763	Q761	Q854	Q705
IC457	IC456	Q764	Q750	Q763	Q761	Q854	Q705

IC458	IC457	Q764	Q750	Q763	Q761	Q854	Q705
IC459	IC458	Q764	Q750	Q763	Q761	Q854	Q705

IC460	IC459	Q764	Q750	Q763	Q761	Q854	Q705
IC461	IC460	Q764	Q750	Q763	Q761	Q854	Q705

IC462	IC461	Q764	Q750	Q763	Q761	Q854	Q705
IC463	IC462	Q764	Q750	Q763	Q761	Q854	Q705

IC464	IC463	Q764	Q750	Q763	Q761	Q854	Q705
IC465	IC464	Q764	Q750	Q763	Q761	Q854	Q705

IC466	IC465	Q764	Q750	Q763	Q761	Q854	Q705
IC467	IC466	Q764	Q750	Q763	Q761	Q854	Q705

IC468	IC467	Q764	Q750	Q763	Q761	Q854	Q705
IC469	IC468	Q764	Q750	Q763	Q761	Q854	Q705

IC470	IC469	Q764	Q750	Q763	Q761	Q854	Q705
IC471	IC470	Q764	Q750	Q763	Q761	Q854	Q705

IC472	IC471	Q764	Q750	Q763	Q761	Q854	Q705
IC473	IC472	Q764	Q750	Q763	Q761	Q854	Q705

IC474	IC473	Q764	Q750	Q763	Q761	Q854	Q705
IC475	IC474	Q764	Q750	Q763	Q761	Q854	Q705

IC476	IC475	Q764	Q750	Q763	Q761	Q854	Q705
IC477	IC476	Q764	Q750	Q763	Q761	Q854	Q705

IC478	IC477	Q764	Q750	Q763	Q761	Q854	Q705
IC479	IC478	Q764	Q750	Q763	Q761	Q854	Q705

IC480	IC479	Q764	Q750	Q763	Q761	Q854	Q705
IC481	IC480	Q764	Q750	Q763	Q761	Q854	Q705

IC482	IC481	Q764	Q750	Q763	Q761	Q854	Q705
IC483	IC482	Q764	Q750	Q763	Q761	Q854	Q705

IC484	IC483	Q764	Q750	Q763	Q761	Q854	Q705
IC485	IC484	Q764	Q750	Q763	Q761	Q854	Q705

IC486	IC485	Q764	Q750	Q763	Q761	Q854	Q705
IC487	IC486	Q764	Q750	Q763	Q761	Q854	Q705

IC488	IC487	Q764	Q750	Q763	Q761	Q854	Q705
IC489	IC488	Q764	Q750	Q763	Q761	Q854	Q705

IC490	IC489	Q764	Q750	Q763	Q761	Q854	Q705
IC491	IC490	Q764	Q750	Q763	Q761	Q854	Q705

IC492	IC491	Q764	Q750	Q763	Q761	Q854	Q705
IC493	IC492	Q764	Q750	Q763	Q761	Q854	Q705

IC494	IC493	Q764	Q750	Q763	Q761	Q854	Q705
IC495	IC494	Q764	Q750	Q763	Q761	Q854	Q705

IC496	IC495	Q764	Q750	Q763	Q761	Q854	Q705
IC497	IC496	Q764	Q750	Q763	Q761	Q854	Q705

IC498	IC497	Q764	Q750	Q763	Q761	Q854	Q705
IC499	IC498	Q764	Q750	Q763	Q761	Q854	Q705

IC500	IC499	Q764	Q750	Q763	Q761	Q854	Q705
IC501	IC500	Q764	Q750	Q763	Q761	Q854	Q705

IC502	IC501	Q764	Q750	Q763	Q761	Q854	Q705
IC503	IC502	Q764	Q750	Q763	Q761	Q854	Q705

IC504	IC503	Q764	Q750	Q763	Q761	Q854	Q705
IC505	IC504	Q764	Q750	Q763	Q761	Q854	Q705

IC506	IC505	Q764	Q750	Q763	Q761	Q854	Q705
IC507	IC506	Q764	Q750	Q763	Q761	Q854	Q705

IC508	IC507	Q764	Q750	Q763	Q761	Q854	Q705
IC509	IC508	Q764	Q750	Q763	Q761	Q854	Q705

IC510	IC509	Q764	Q750	Q763	Q761	Q854	Q705
IC511	IC510	Q764	Q750	Q763	Q761	Q854	Q705

IC512	IC511	Q764	Q750	Q763	Q761	Q854	Q705
IC513	IC512	Q764	Q750	Q763	Q761	Q854	Q705

IC514	IC513	Q764	Q750	Q763	Q761	Q854	Q705
IC515	IC514	Q764	Q750	Q763	Q761	Q854	Q705

IC516	IC515	Q764	Q750	Q763	Q761	Q854	Q705
IC517	IC516	Q764	Q750	Q763	Q761	Q854	Q705

IC518	IC517	Q764	Q750	Q763	Q761	Q854	Q705
IC519	IC518	Q764	Q750	Q763	Q761	Q854	Q705

IC520	IC519	Q764	Q750	Q763	Q761	Q854	Q705
IC521	IC520	Q764	Q750	Q763	Q761	Q854	Q705

IC522	IC521	Q764	Q750	Q763	Q761	Q85
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TUNER AMP P.C. BOARD

Q506 Q507 Q505 Q504 Q604 Q605 Q608 IC701 IC451 Q603 Q764 Q762 Q856 Q852 Q704 Q756
 IC.Q Q509 Q510 Q501 IC501 Q502 Q601 Q607 IC601 IC452 Q701 Q611 Q750 IC703 Q763 Q801 Q761 Q854 Q705 Q708 Q802 Q857 IC555
 IC454 IC453 Q752 Q706 IC702 Q751 Q758 Q702 Q703 Q707 Q855 Q853 Q552 Q851 Q551

ADJ

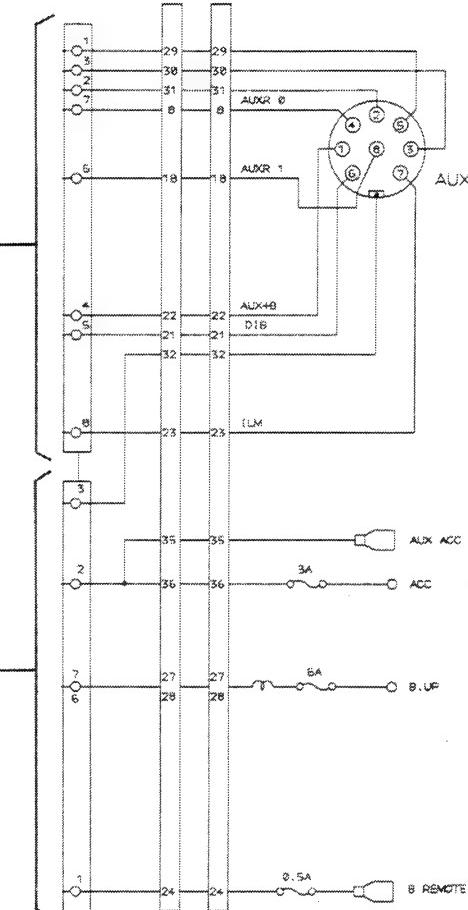
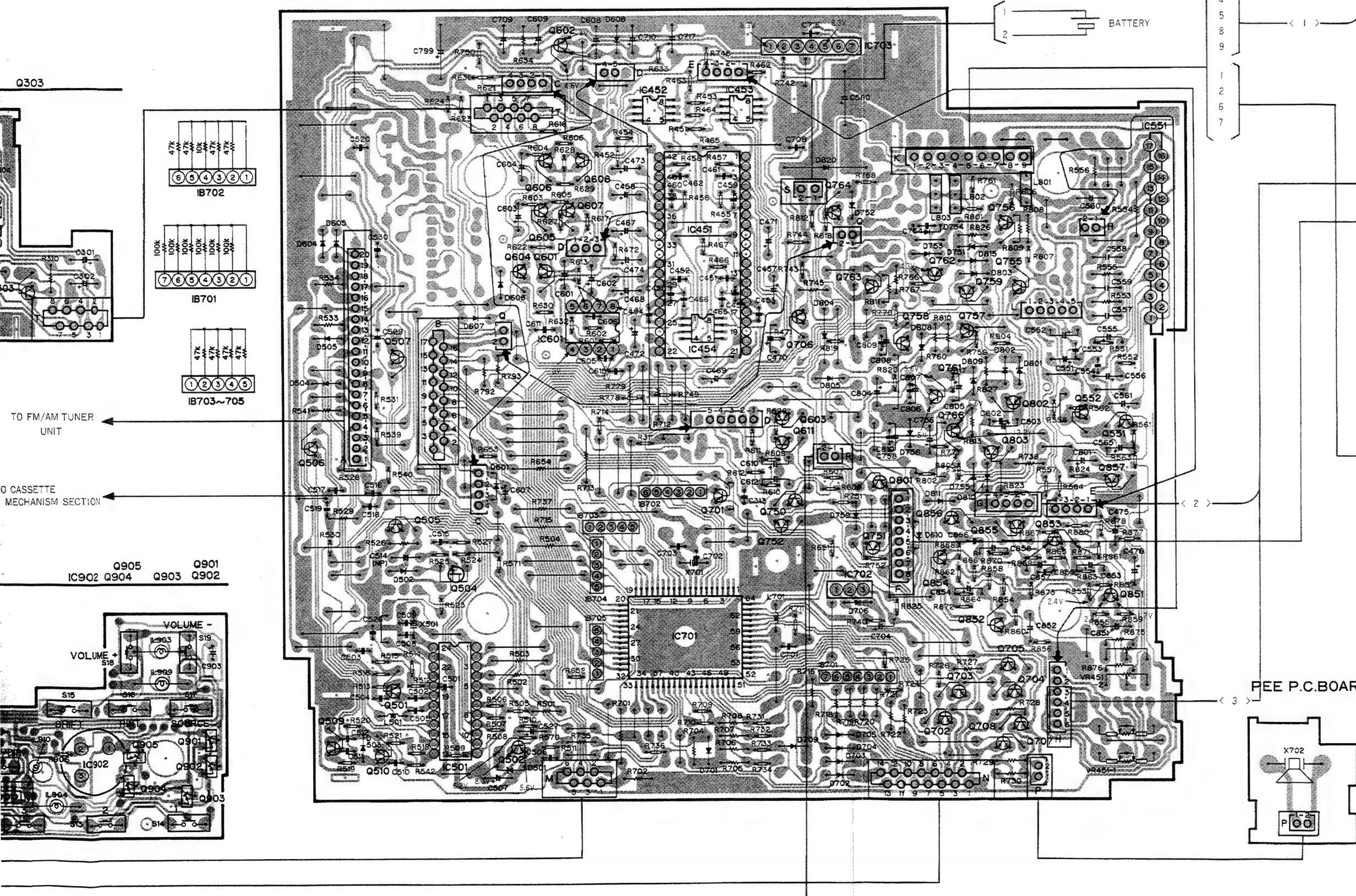


Fig. 13

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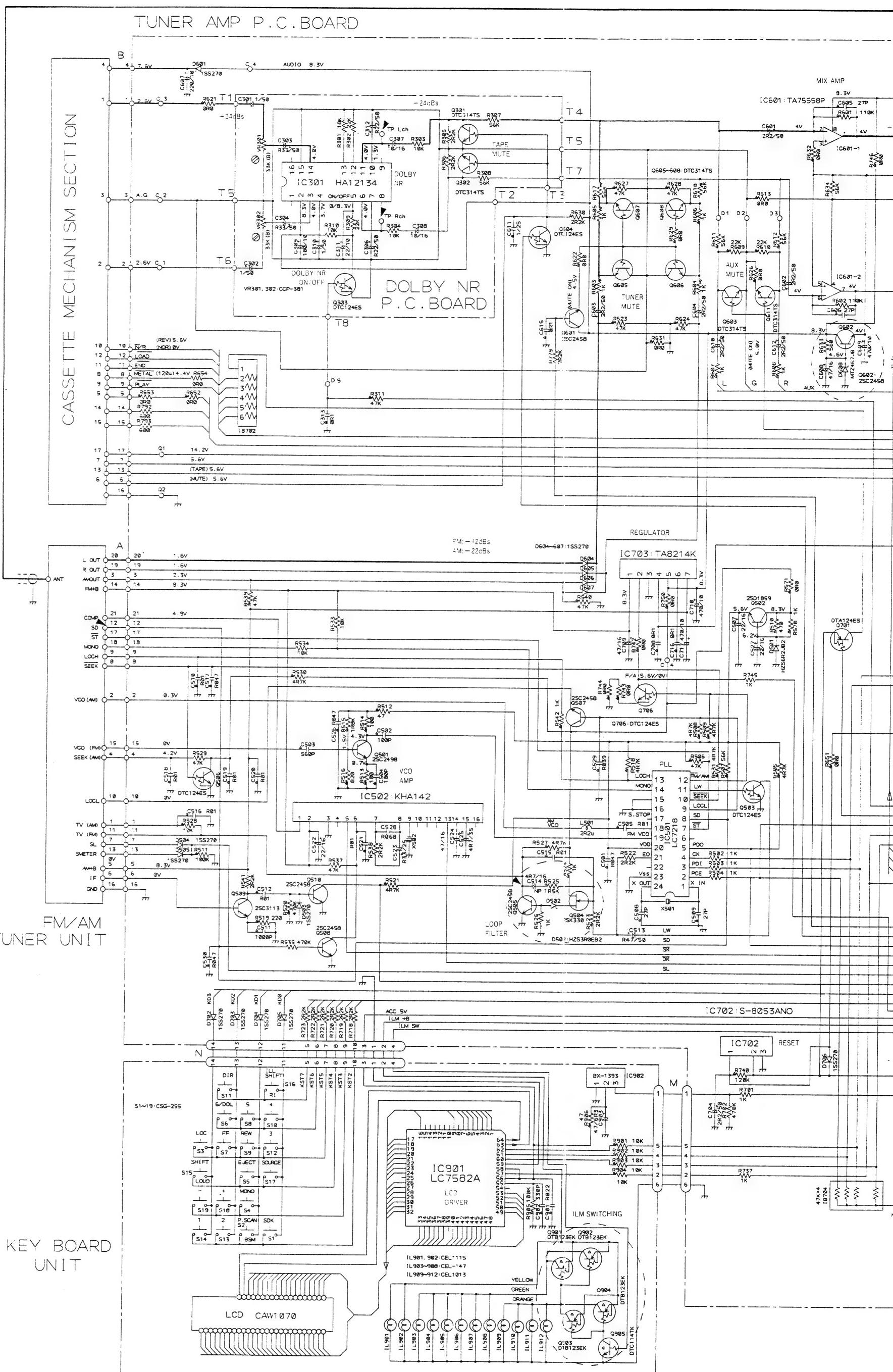
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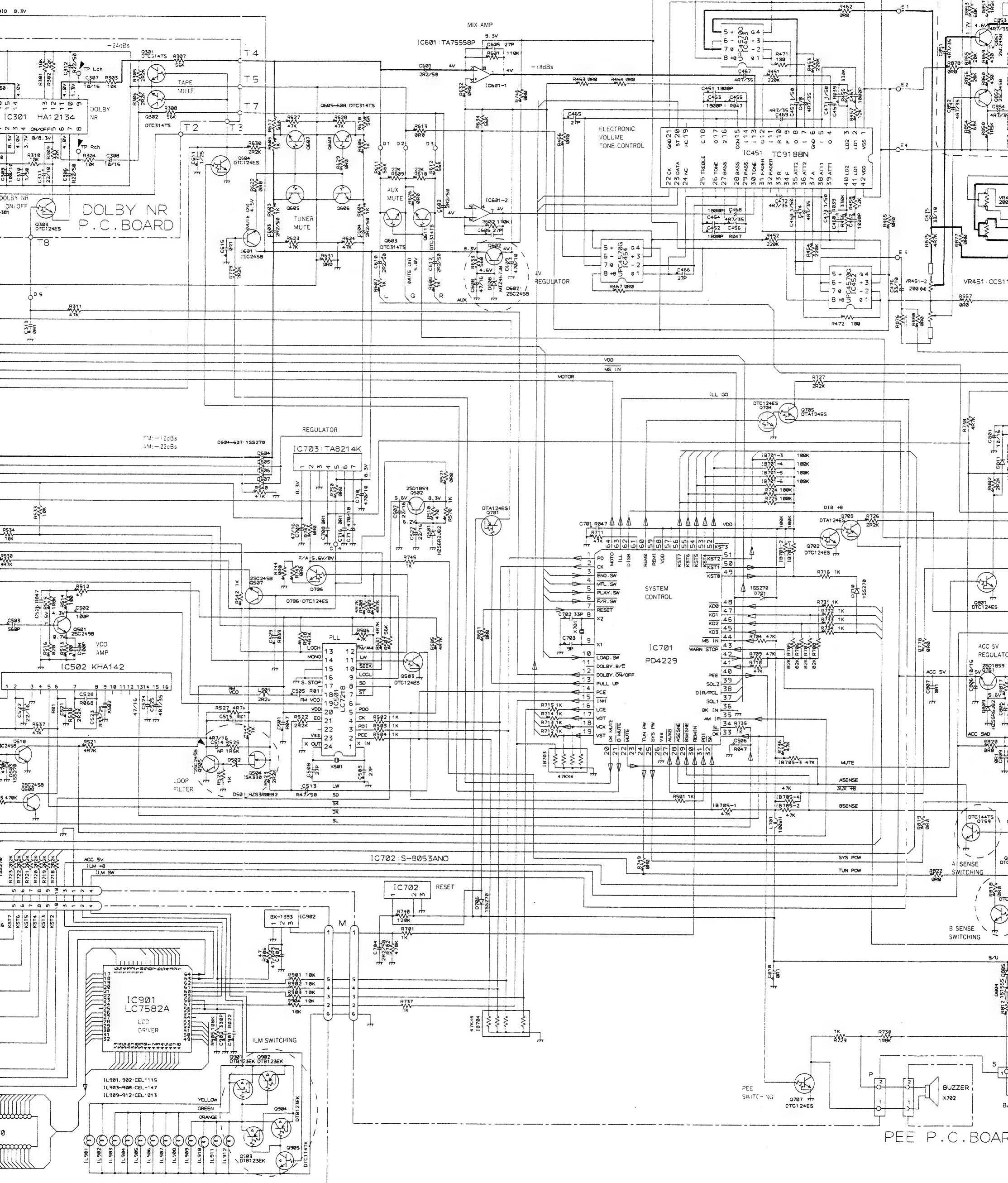
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10. SCHEMATIC CIRCUIT DIAGRAM (KEH-8100SDK)





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REGULATOR

MOTOR

SYSTEM CONTROL

PD4229

1C701

TUNER AMP UNIT

PEE P.C. BOARD

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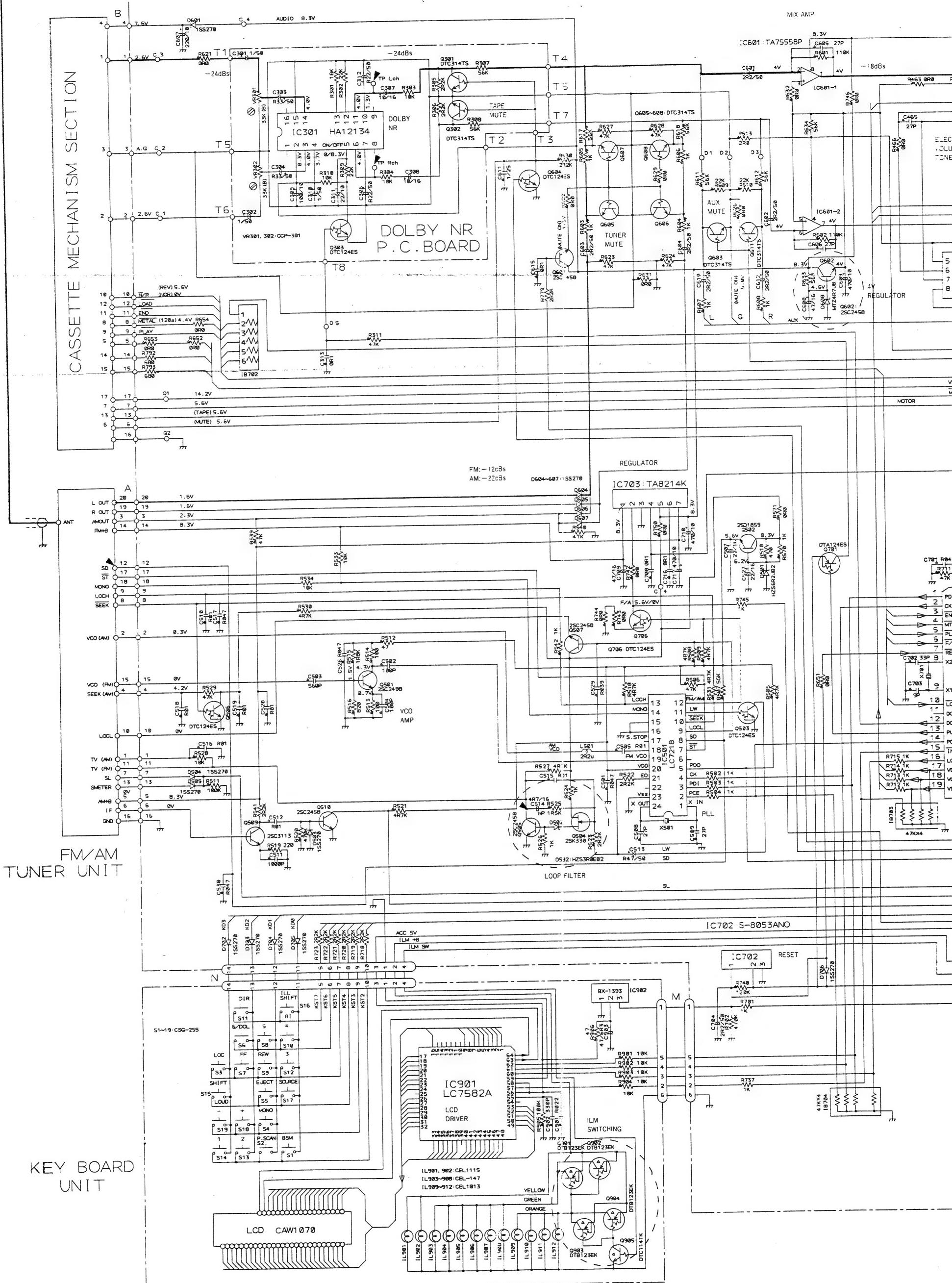
266

267

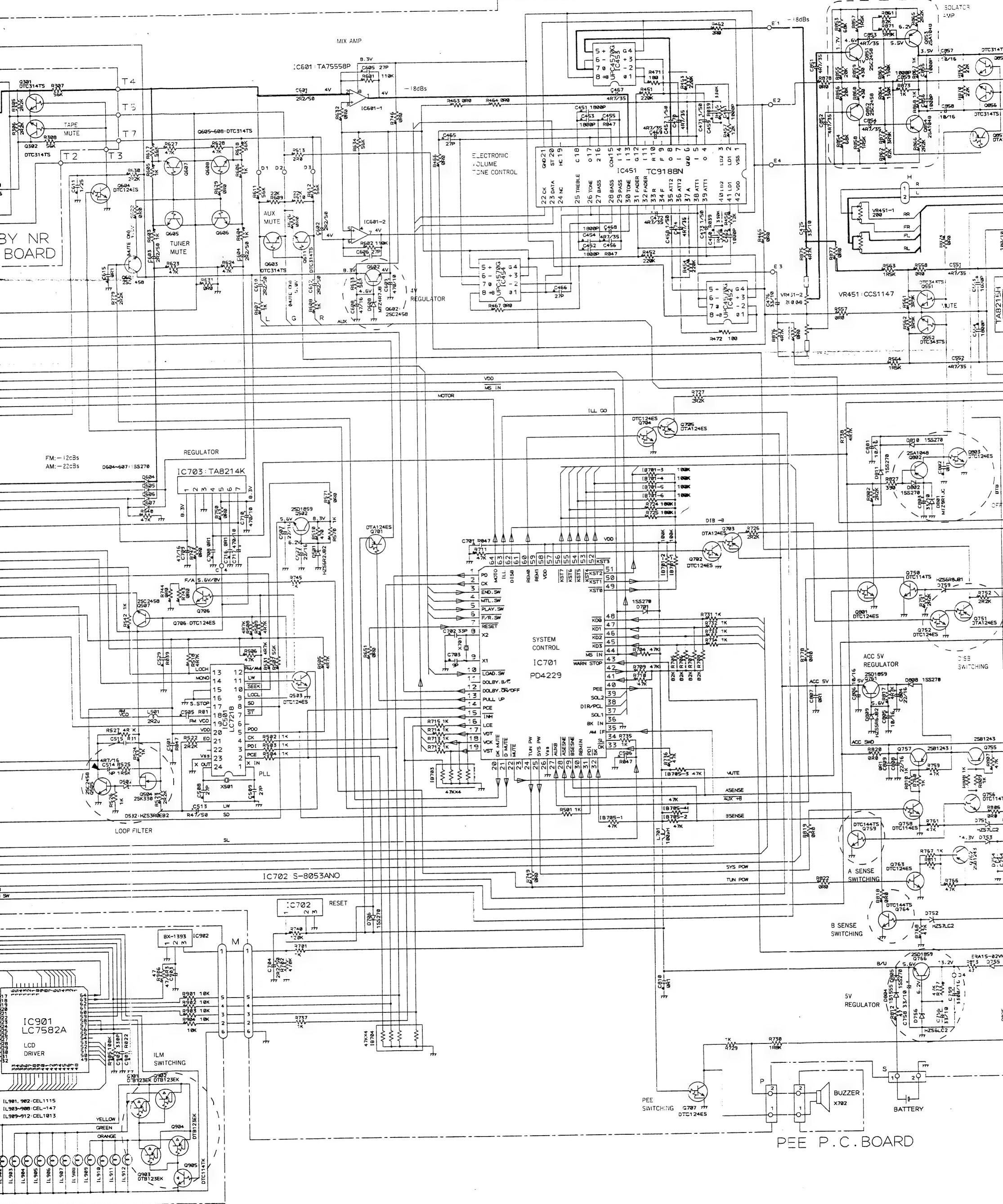
11. SCHEMATIC CIRCUIT DIAGRAM (KEH-8100B, KEH-8101B)

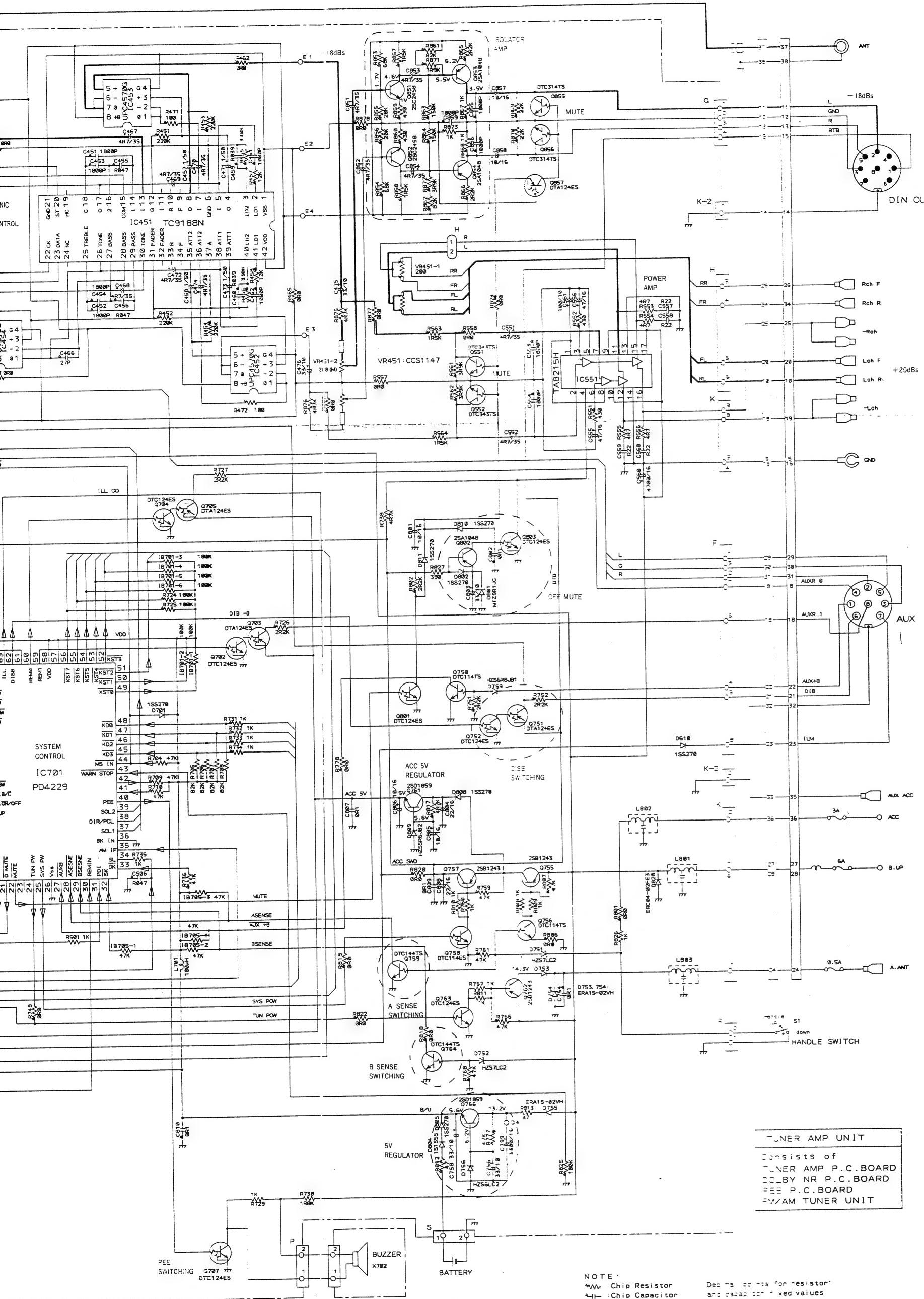
A

TUNER AMP P.C. BOARD



, KEH-8101B)





TUNER AMP UNIT
Consists of
TUNER AMP P.C.BOARD
DOLBY NR P.C.BOARD
SEE P.C.BOARD
FM/AM TUNER UNIT

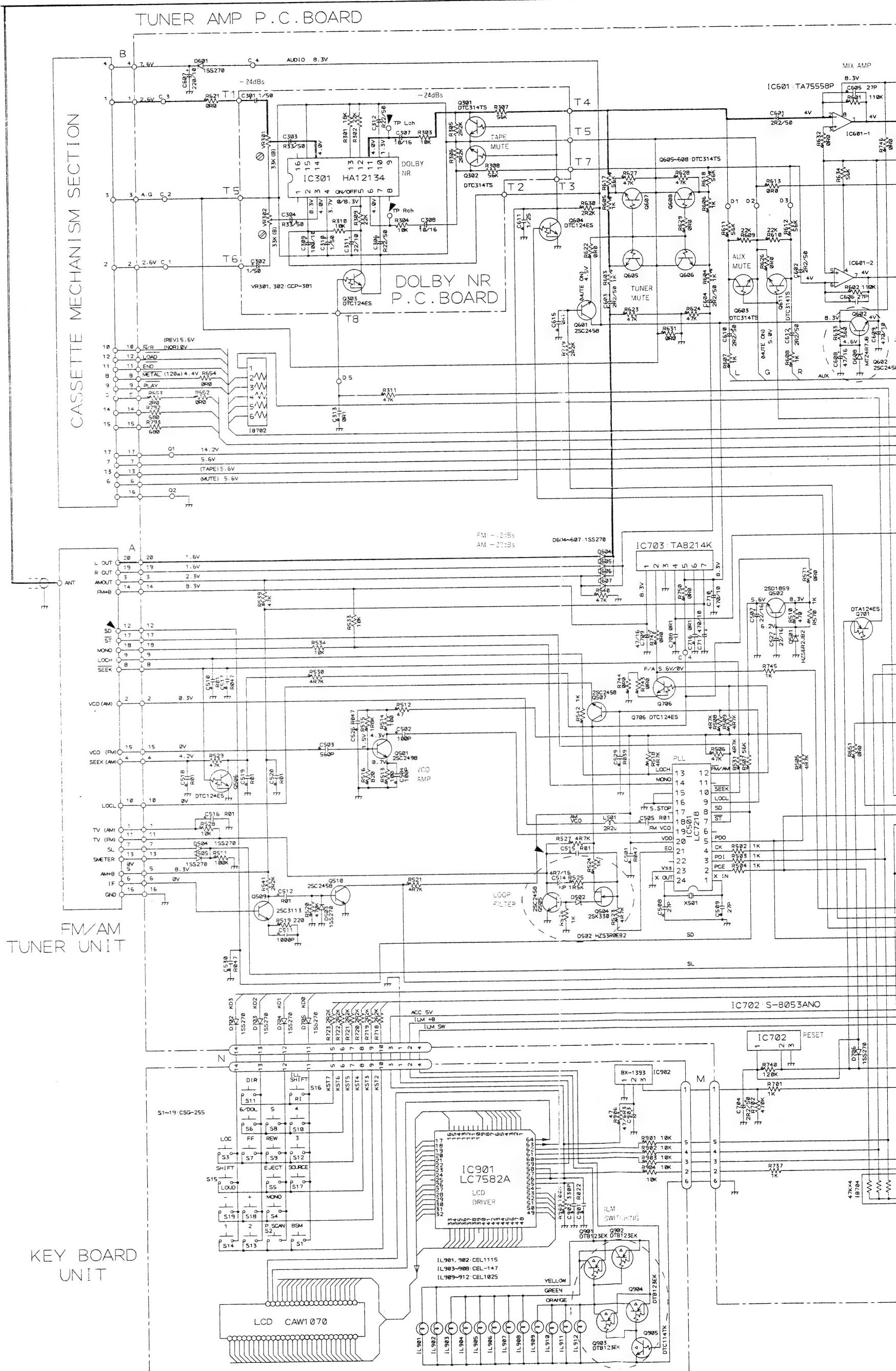
NOTE :

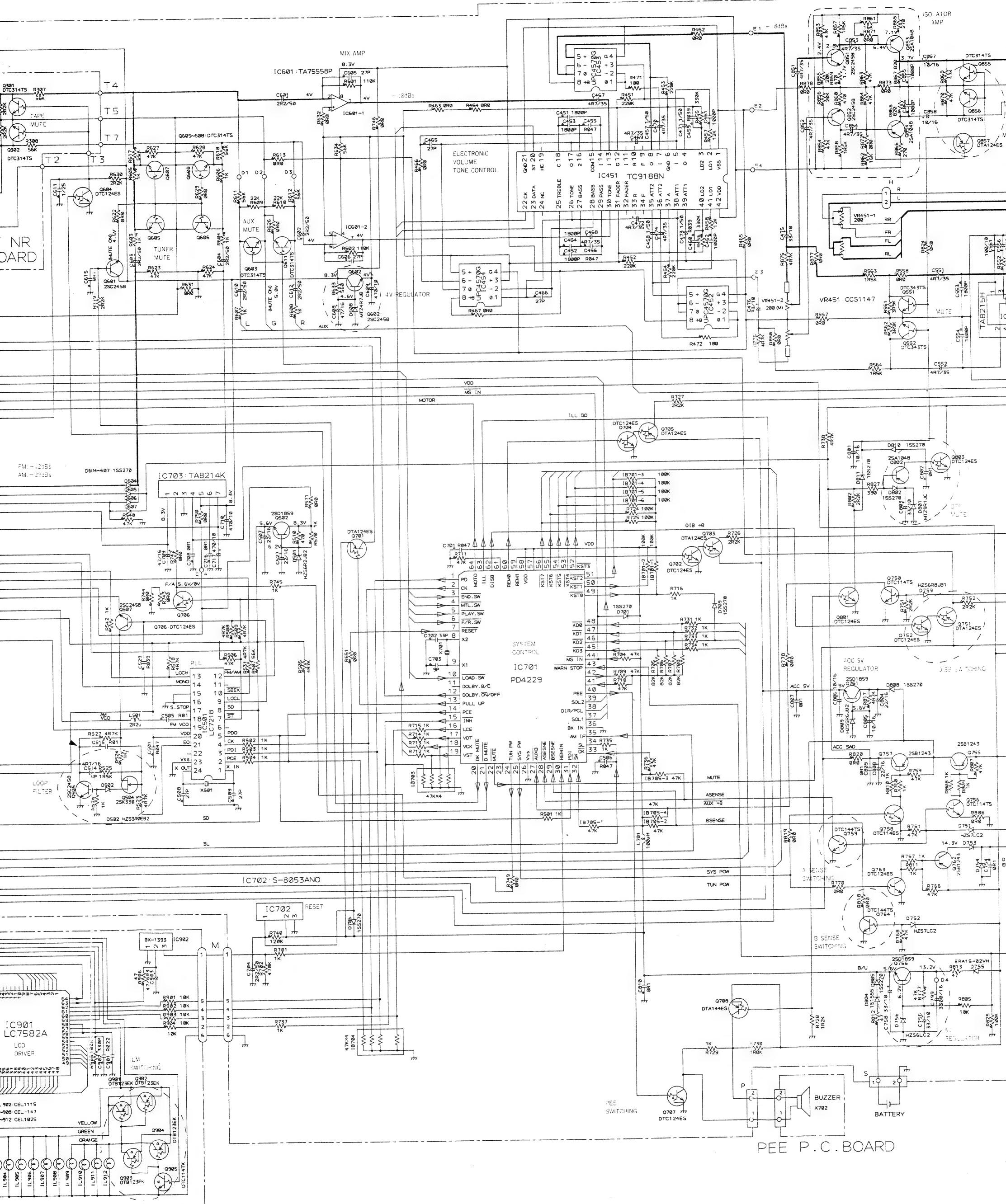
- ▲ ▽ : Chip Resistor
- ▲ ─ : Chip Capacitor
- ▲ △ : Chip Diode
-  : Chip Transistor

Decimals for resistor and capacitor values are expressed as:
 2.5E-2
 0.333E-300

Fig. 11

14. SCHEMATIC CIRCUIT DIAGRAM (KEH-8100QR)





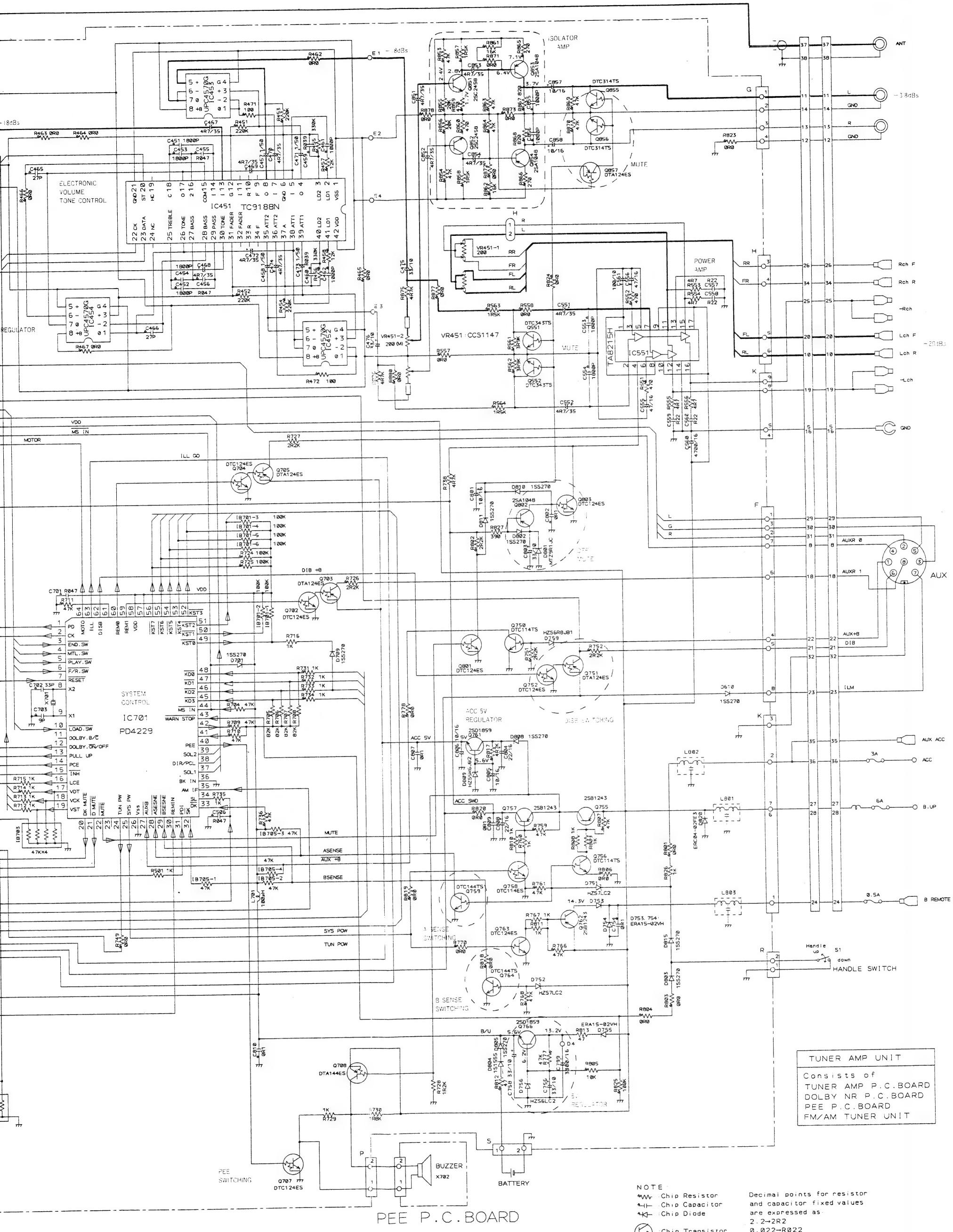
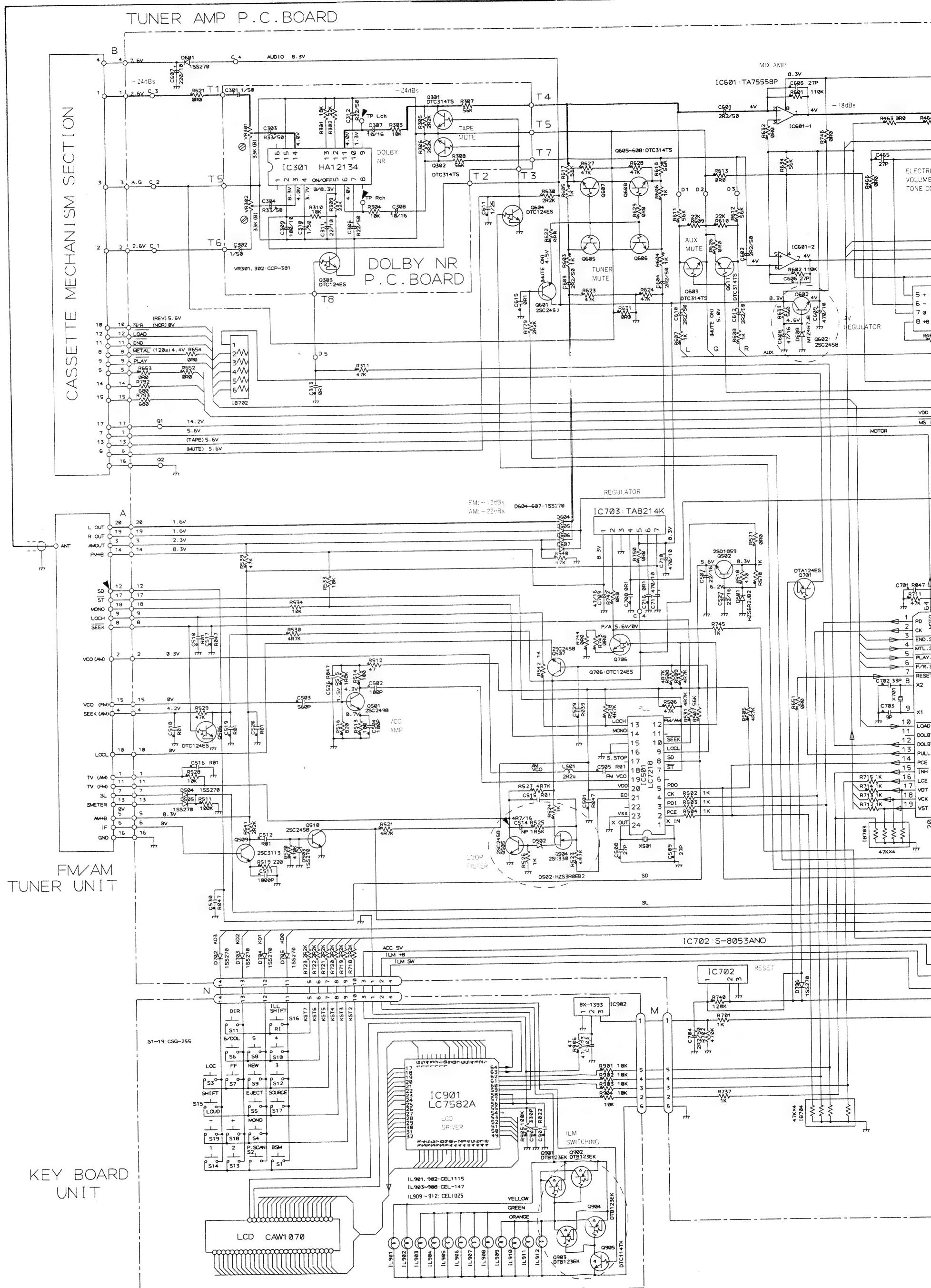
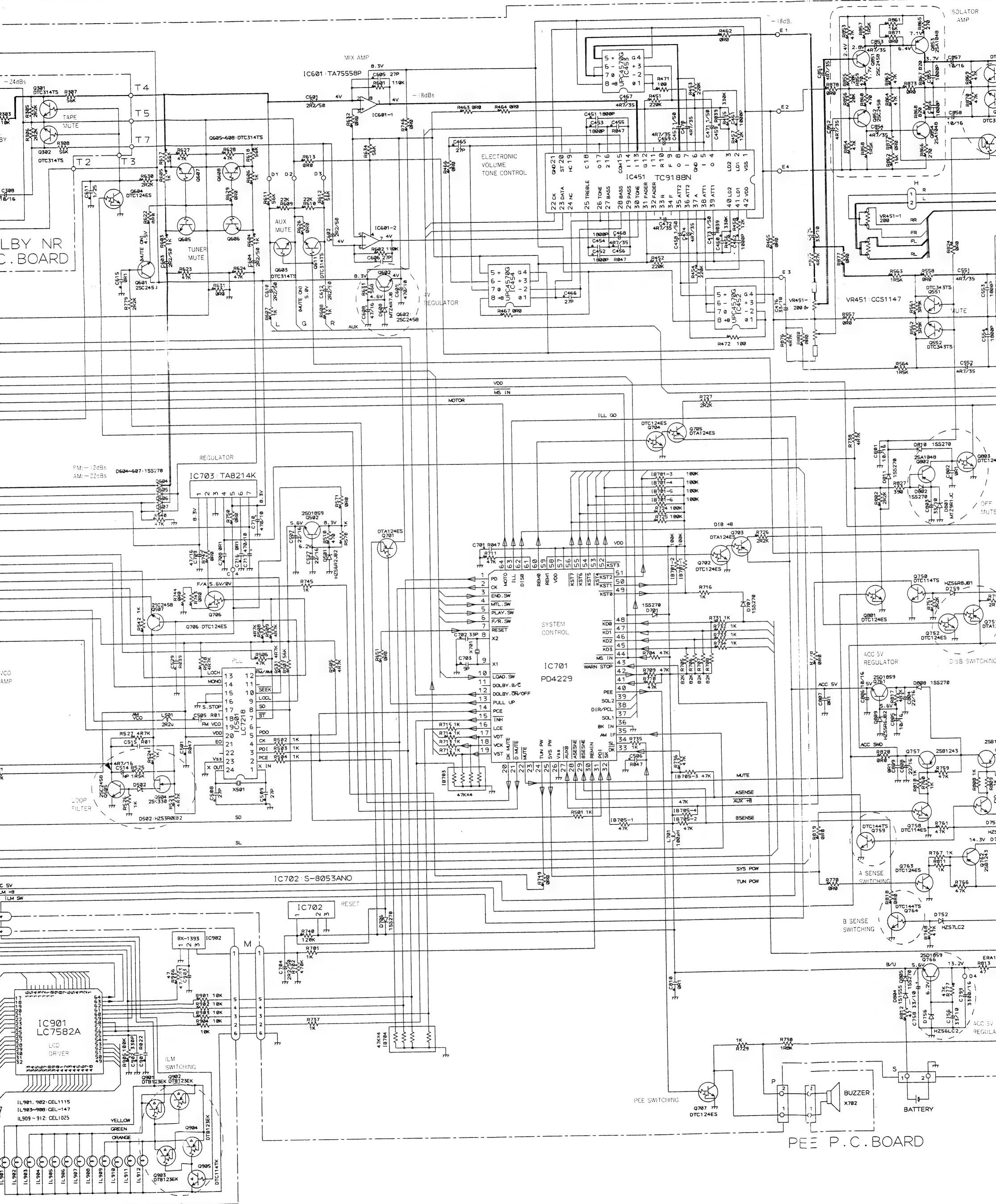


Fig. 14

15. SCHEMATIC CIRCUIT DIAGRAM (F)





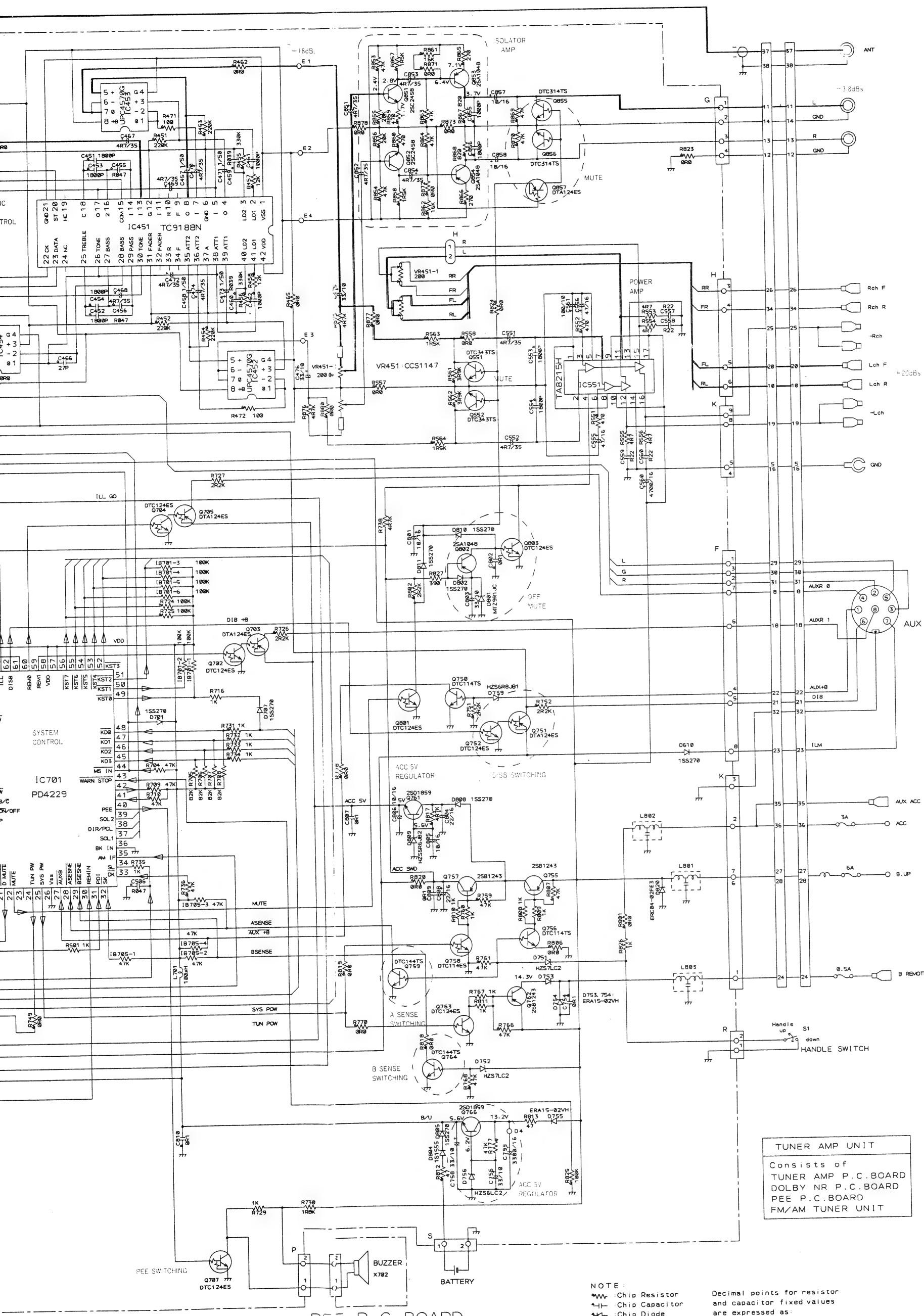


Fig. 15

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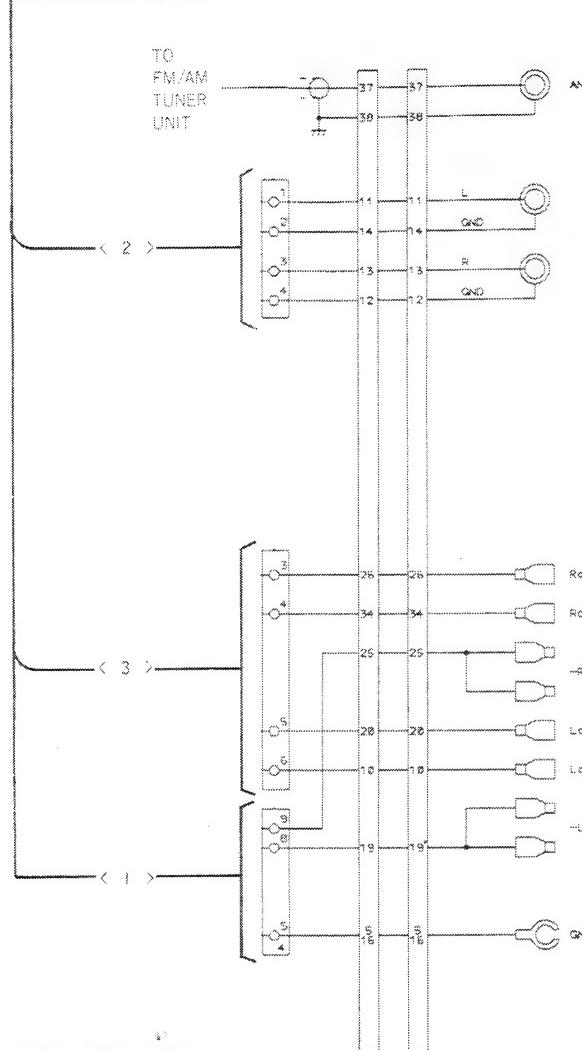
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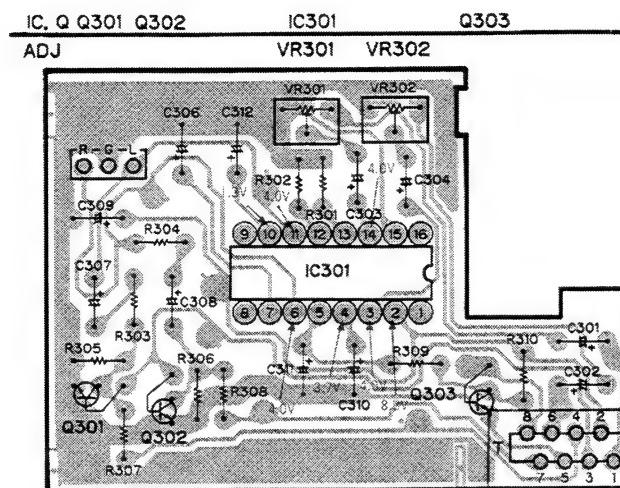
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16. CONNECTION DIAGRAM (KEH-8150QR/ES)



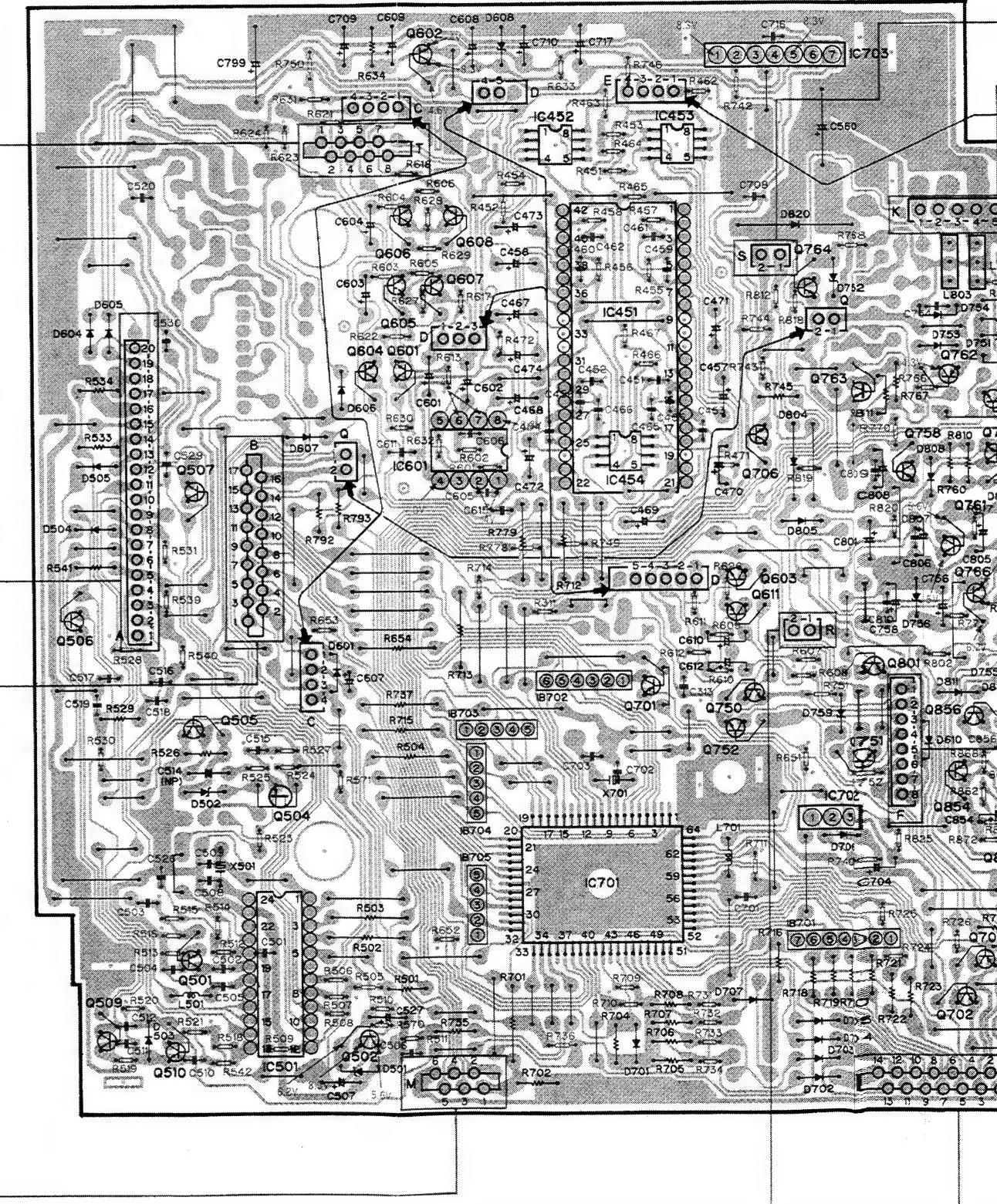
DOLBY NR P.C. BOARD



TUNER P.C. BOARD

Q506 Q507 Q505 Q504 Q606 Q602 Q766 Q764
IC, Q Q509 Q510 Q501 Q604 Q605 Q608 Q762 Q856 Q854
IC501 Q502 Q601 Q607 IC601 IC701 IC451 Q611 Q750 IC703 Q763 Q801 Q761 Q854 Q765
IC454 IC453 Q752 Q706 IC702 Q751 Q758 Q702 Q766

ADJ



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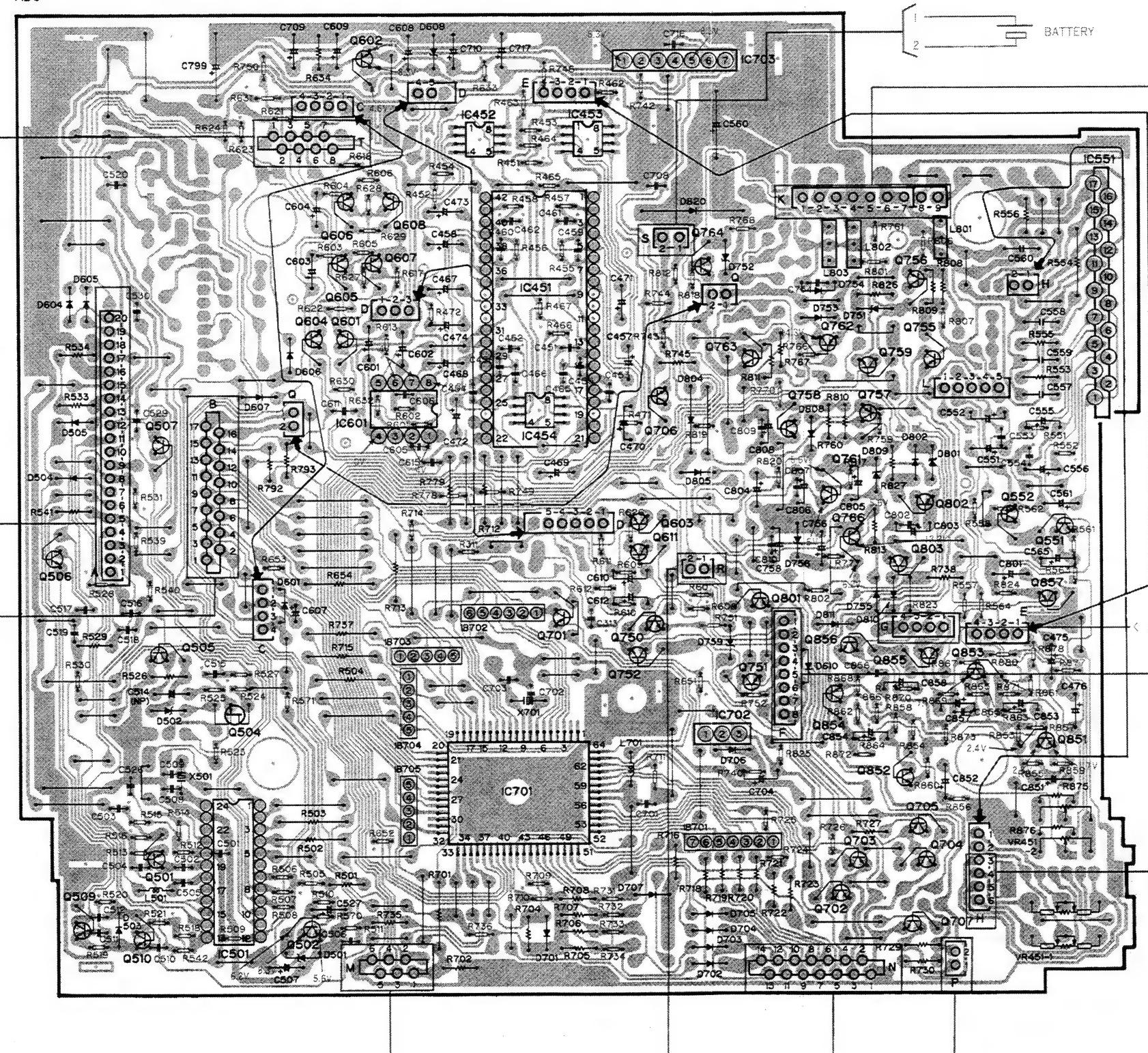
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TUNER P.C.BOARD

Q506 Q507 Q505 Q504 Q604 Q605 Q608 IC701 IC451 Q603 Q764 Q762 Q856 Q852 Q704 Q756
 Q509 Q510 Q501 IC501 Q502 Q601 Q607 IC601 IC452 IC454 IC453 Q752 Q706 IC702 Q751 Q758 Q702 Q703 Q707 Q855 Q853 Q552 Q851 Q55
 Q857 IC55

AD



PEE P.C.BOARD

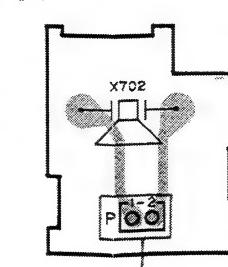


Fig. 16

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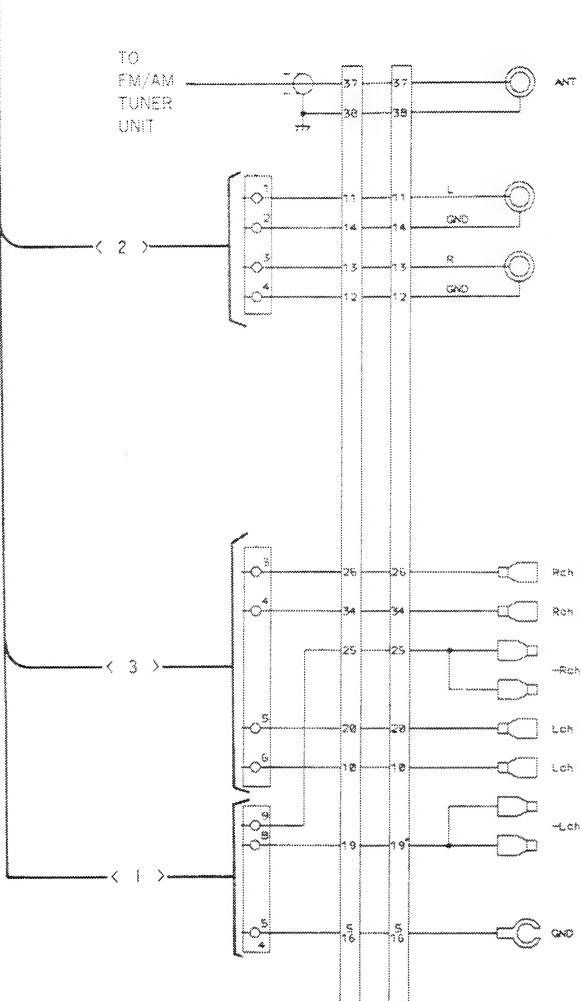
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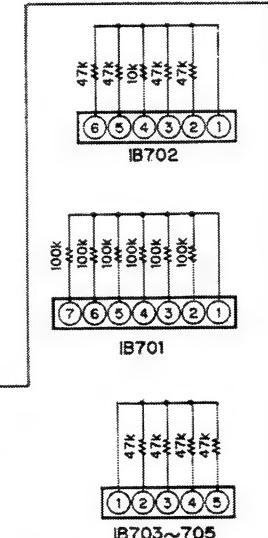
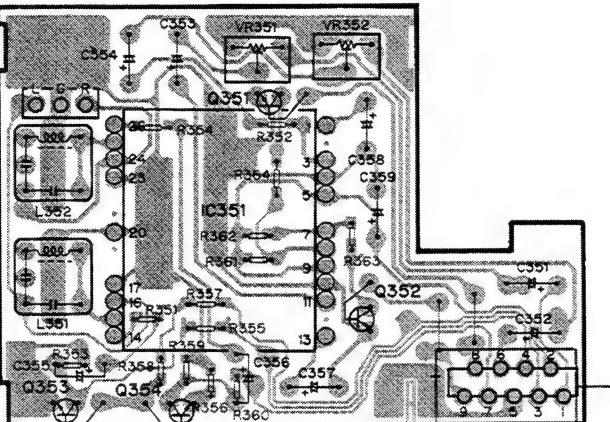
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17. CONNECTION DIAGRAM (KEH-8150QR/CA, KEH-700QR)

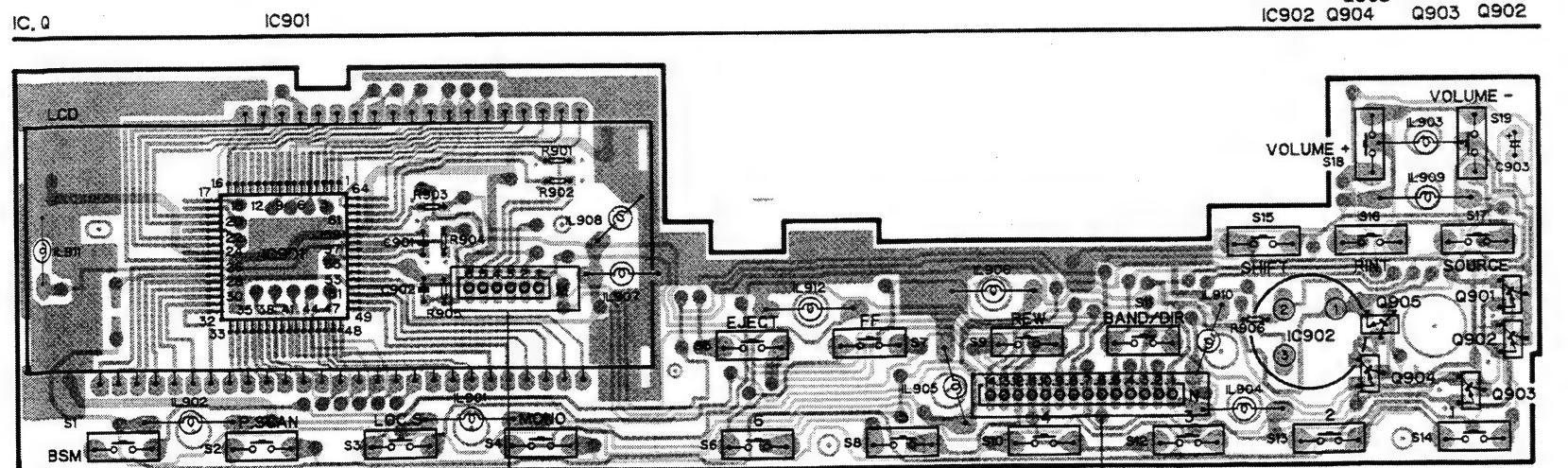


DOLBY NR P.C. BOARD

IC, Q Q353 Q354 IC351 Q351 Q352
ADJ VR351 VR352

IB703~705

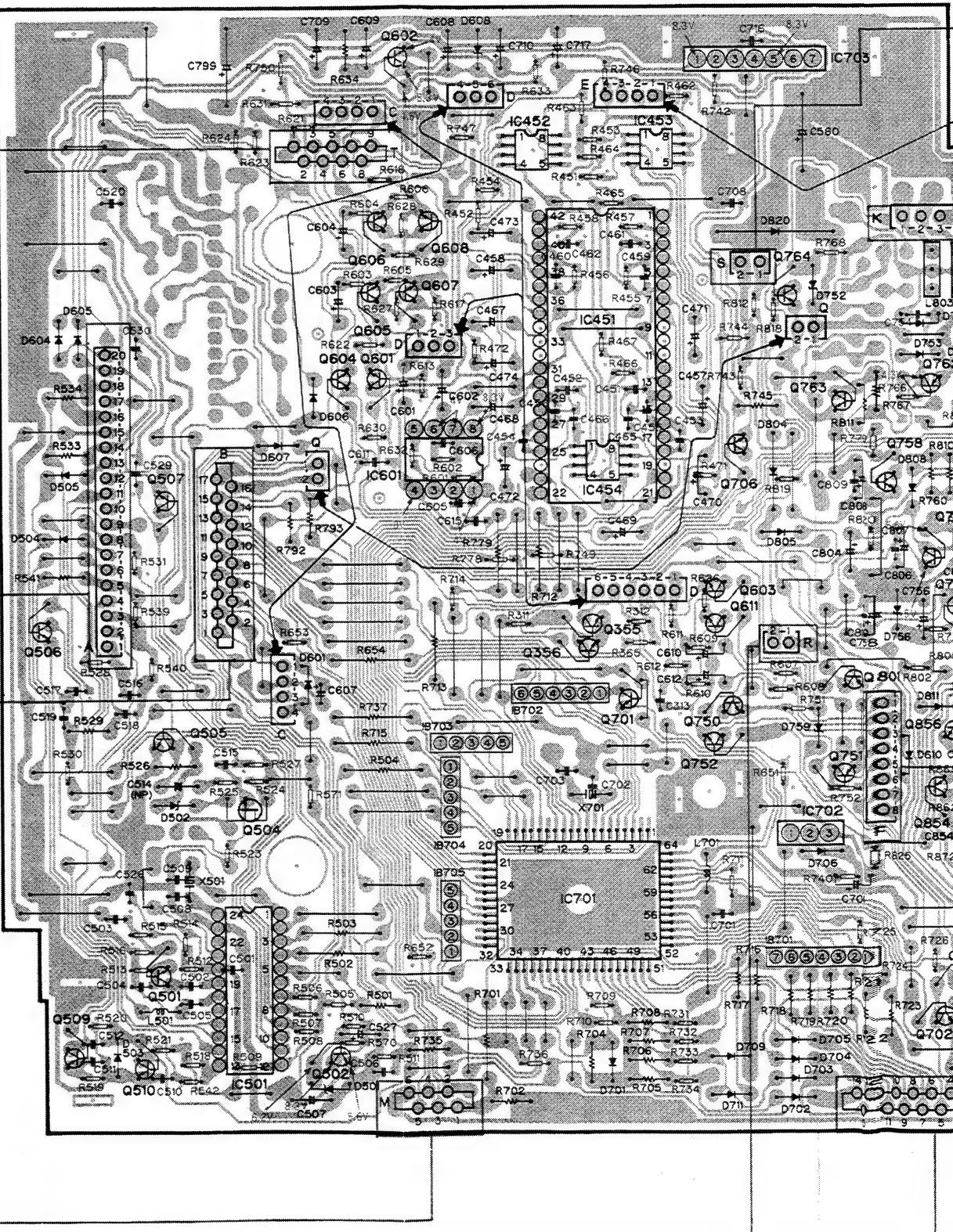
KEY BOARD UNIT



TUNER AMP P.C.BOARD

Q506 Q507 Q505 Q504 Q606 Q602 Q604 Q605 Q608 IC451 Q603 Q764 IC701 Q355 Q701 Q611 Q750 IC703 Q763 Q801 Q761 Q854 Q705 IC501 Q502 Q601 Q607 IC601 IC452 Q356 IC454 IC453 Q752 Q706 IC702 Q751 Q758 Q702 Q703

ADJ



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TUNER AMP P.C.BOARD

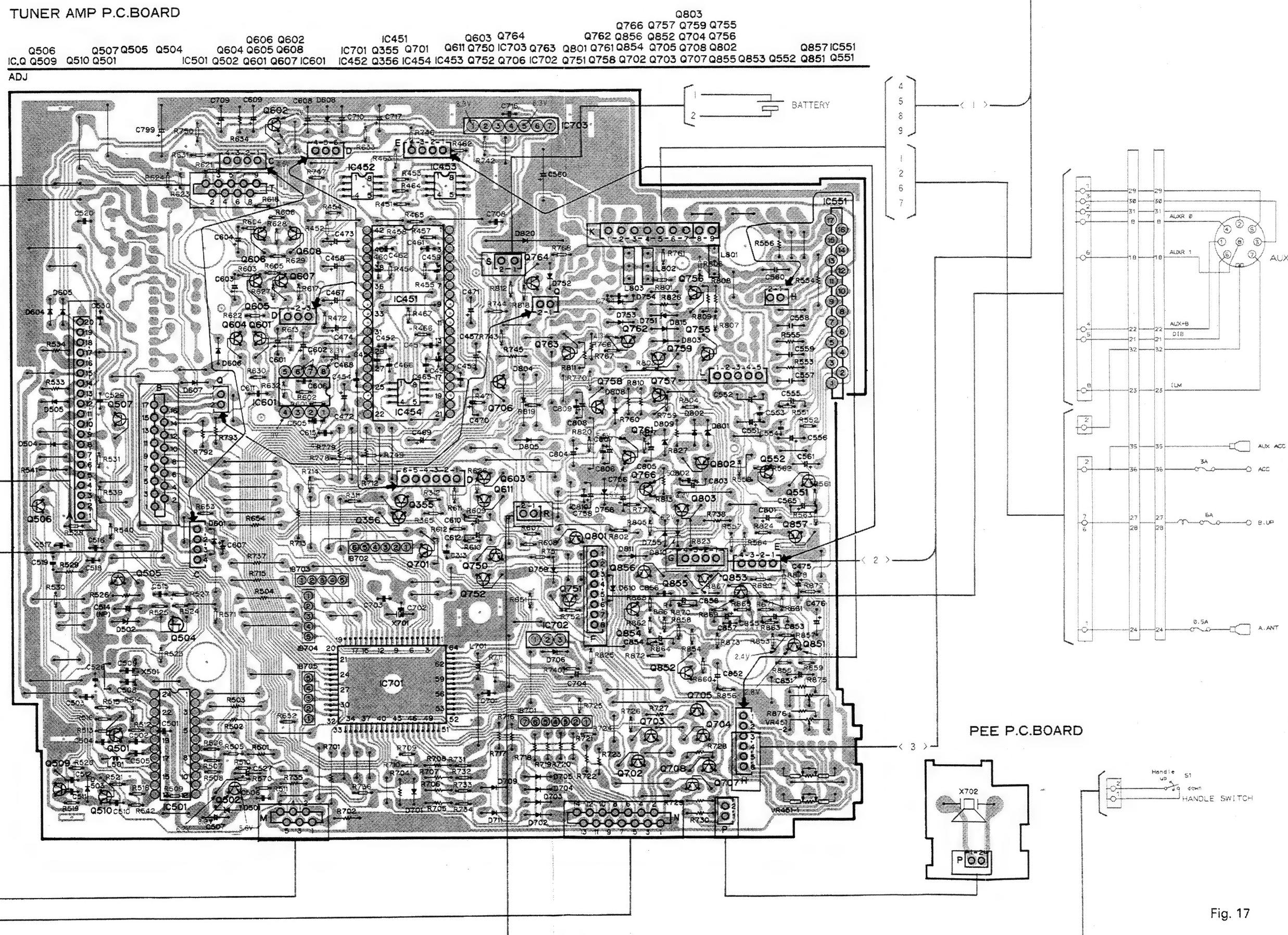


Fig. 17

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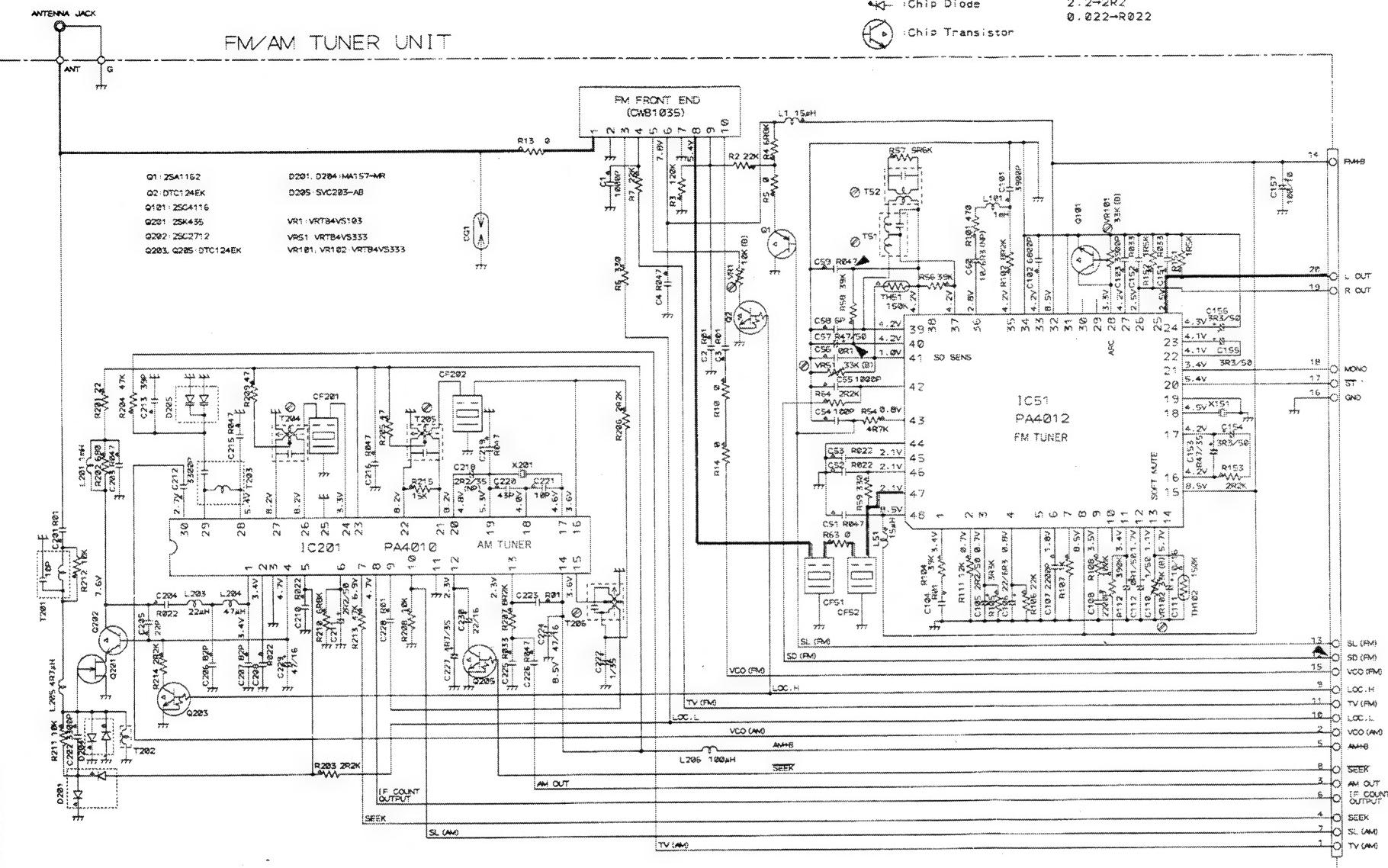
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19.3 FM/AM TUNER UNIT (KEH-8150QR/ES)



NOTE:
 * Chip Resistor
 * Chip Capacitor
 * Chip Diode
 * Chip Transistor

Decimal points for resistor and capacitor fixed values are expressed as:
 2.2→R22
 0.022→R022

19.4 FM/AM TUNER UNIT (KEH-8100QR, KEH-8150)

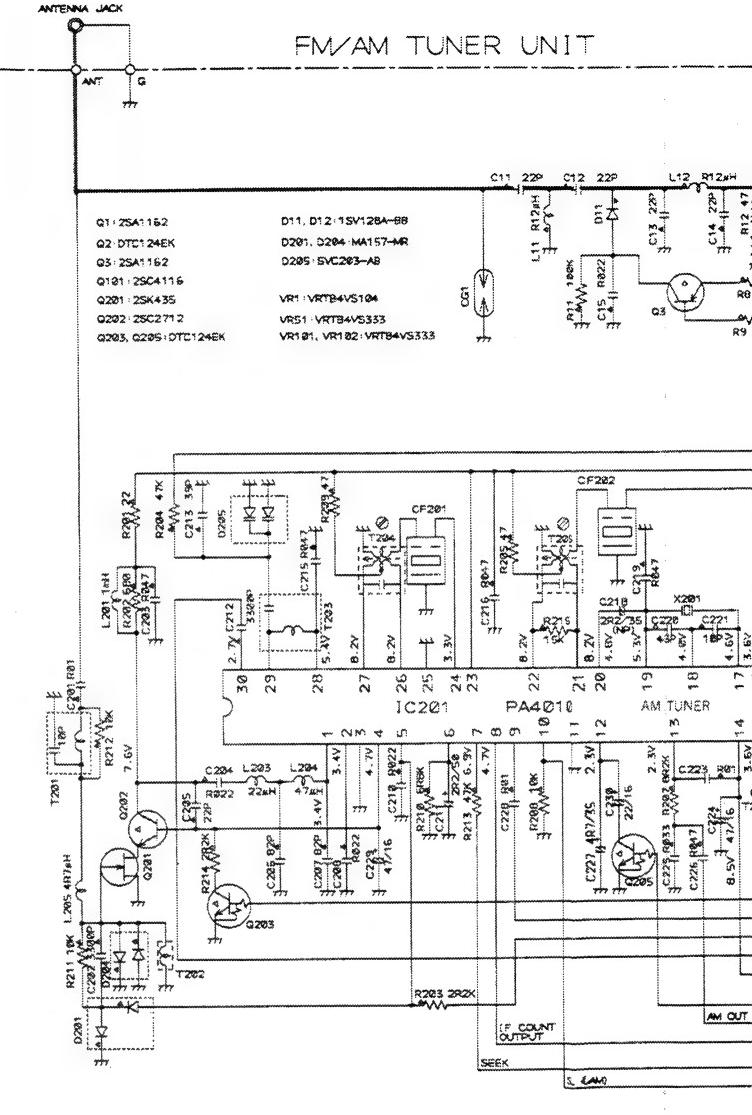
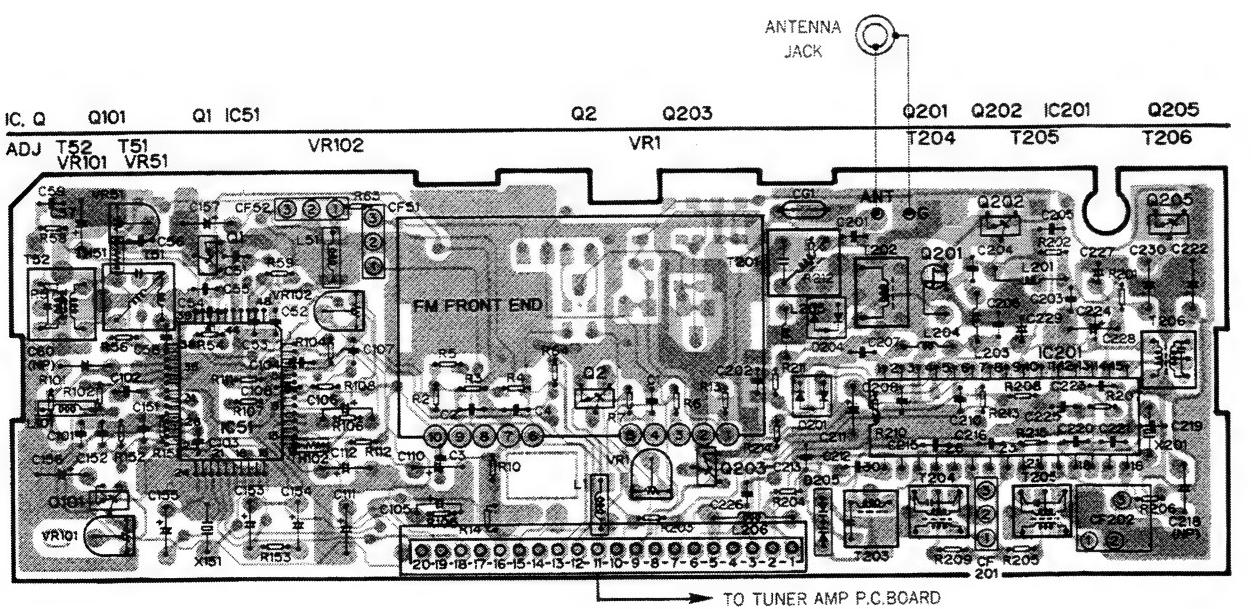


Fig. 23



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NOTE:

- Chip Resistor
- ▲Chip Capacitor
- △Chip Diode
- Chip Transistor

Decimal points for resistor and capacitor
fixed values are expressed as:
 $2.2 \rightarrow 2R2$
 $0.022 \rightarrow R022$

19.4 FM/AM TUNER UNIT (KEH-8100QR, KEH-8150QR/CA, 700QR)

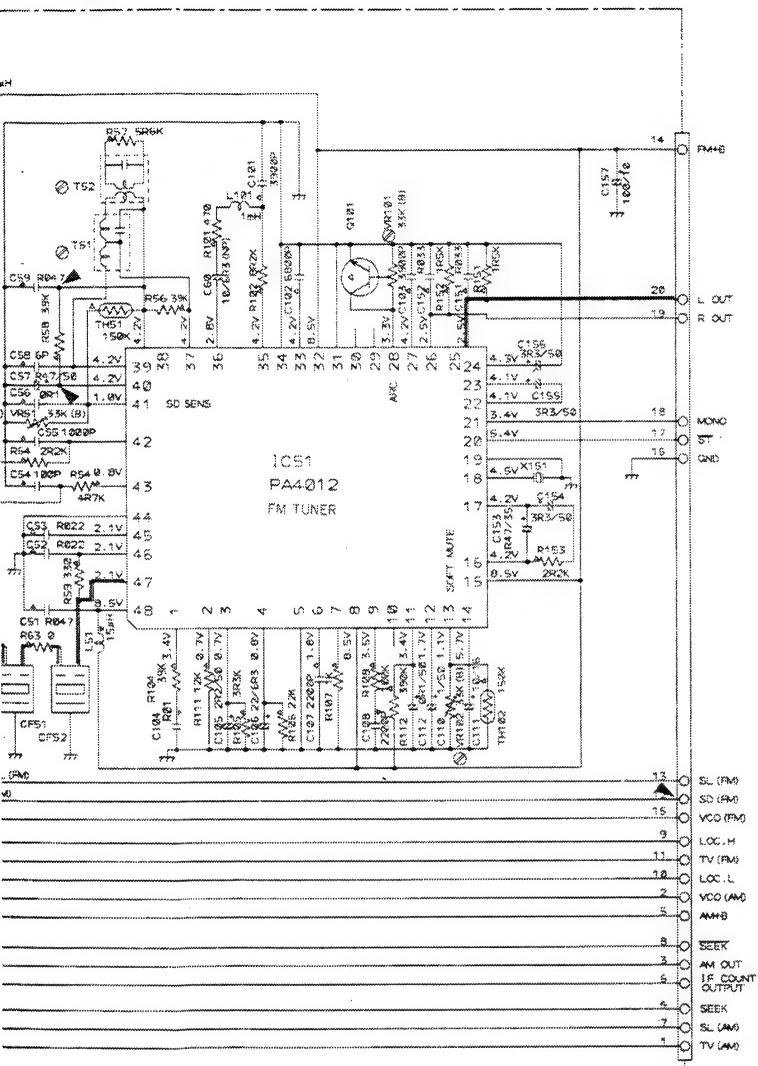


Fig. 23

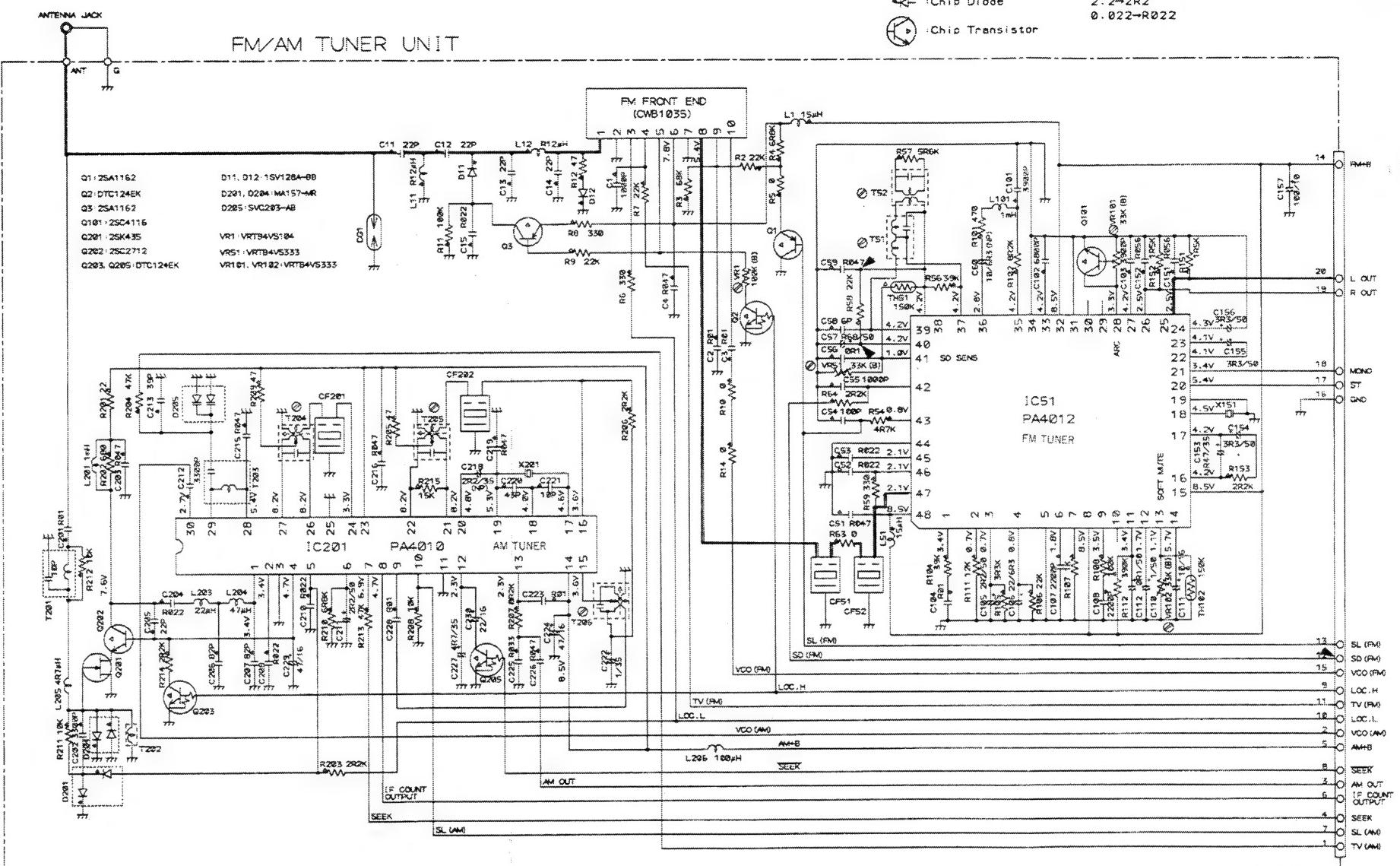


Fig. 25

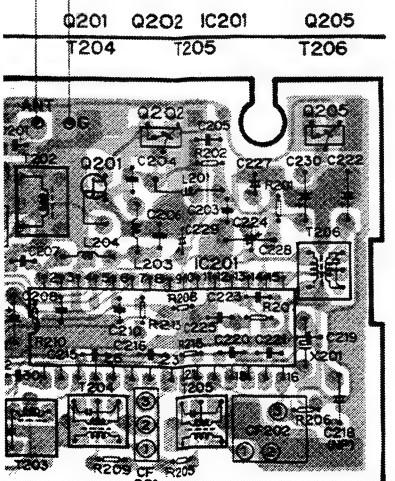


Fig. 24

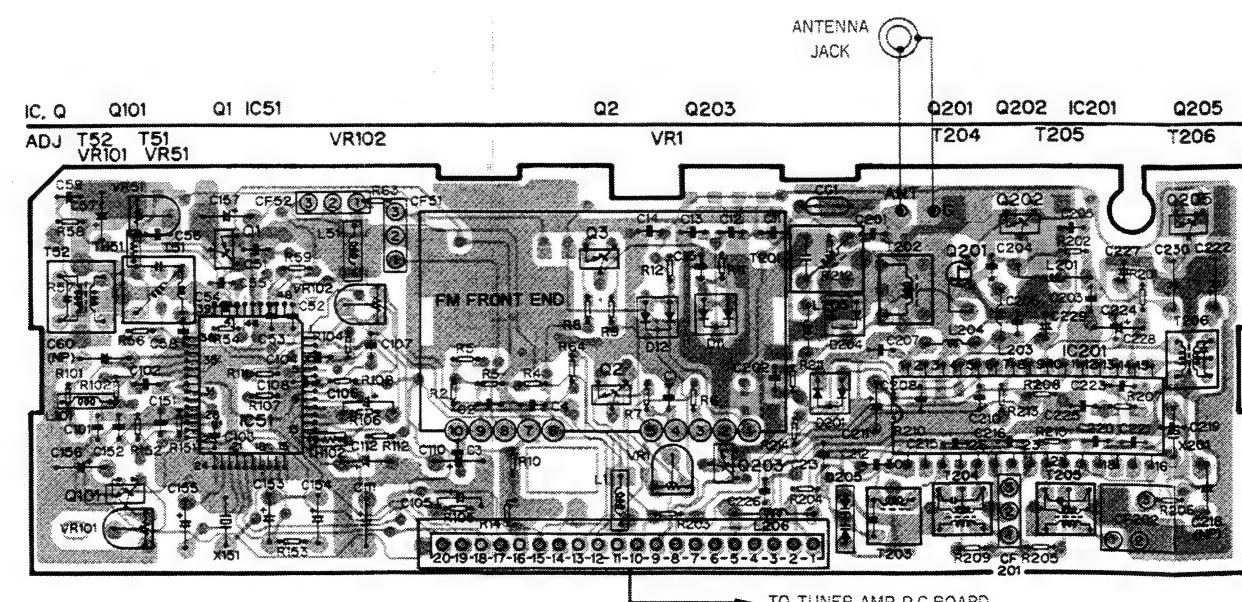
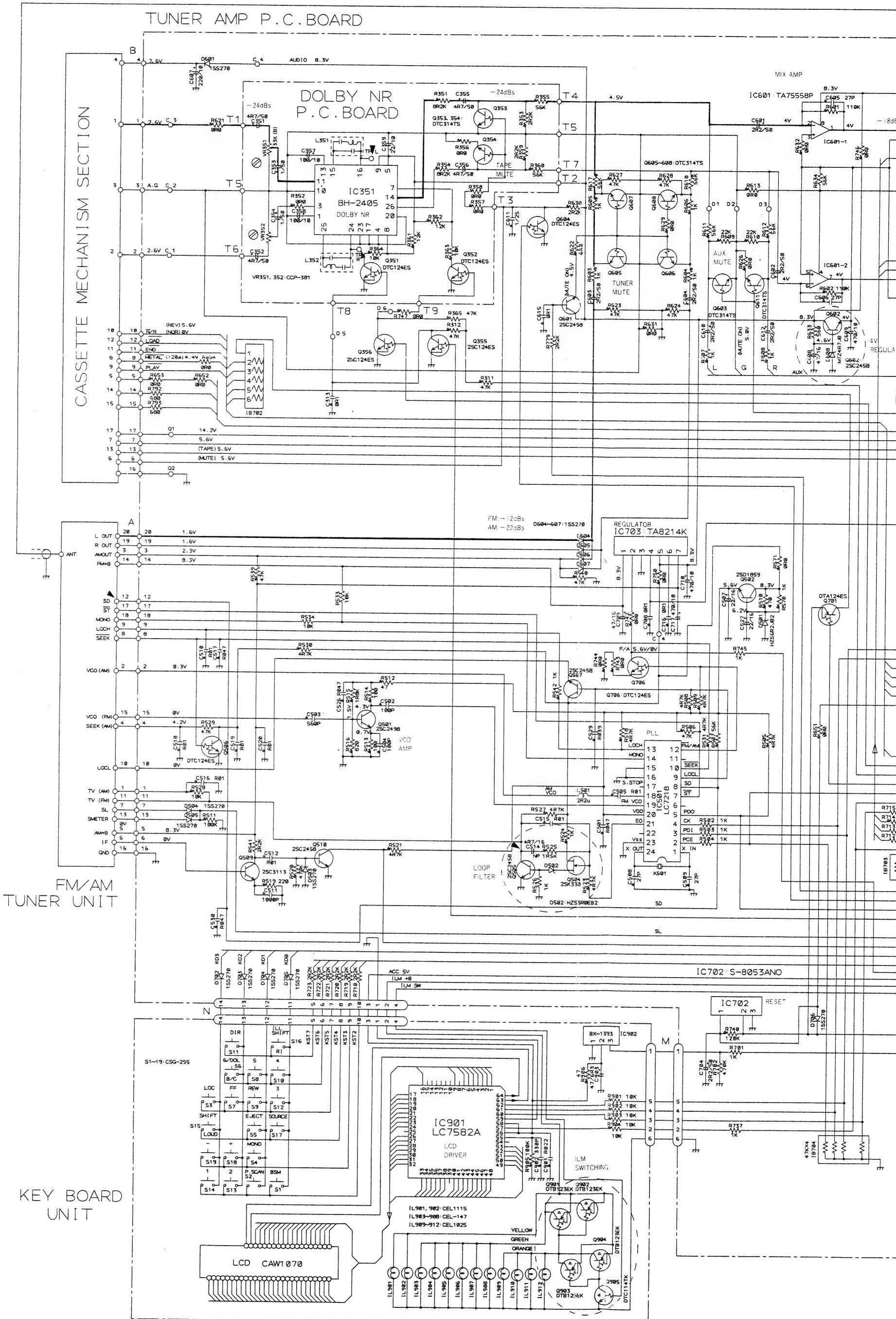


Fig. 26

18. SCHEMATIC CIRCUIT DIAGRAM



BOARD

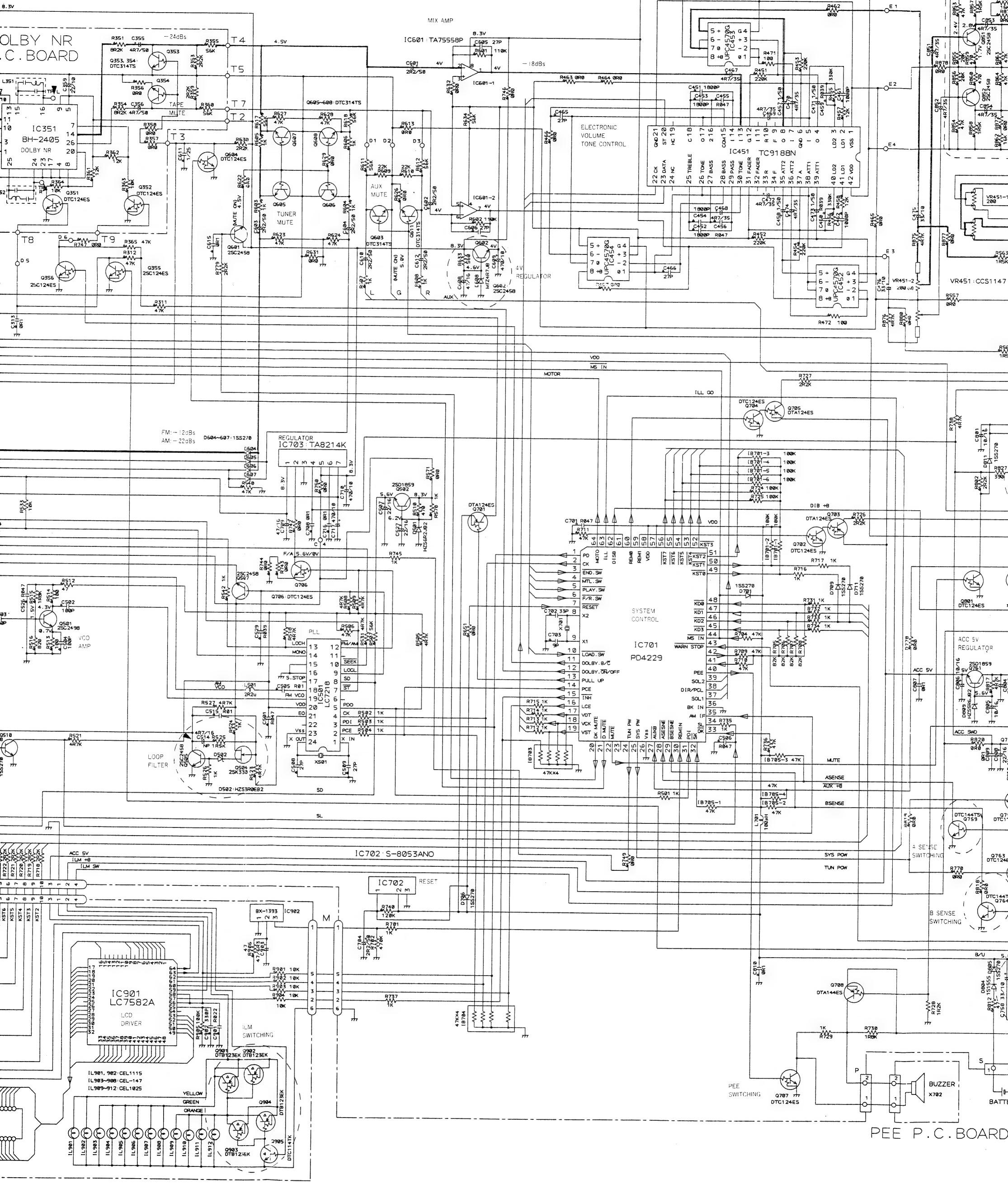
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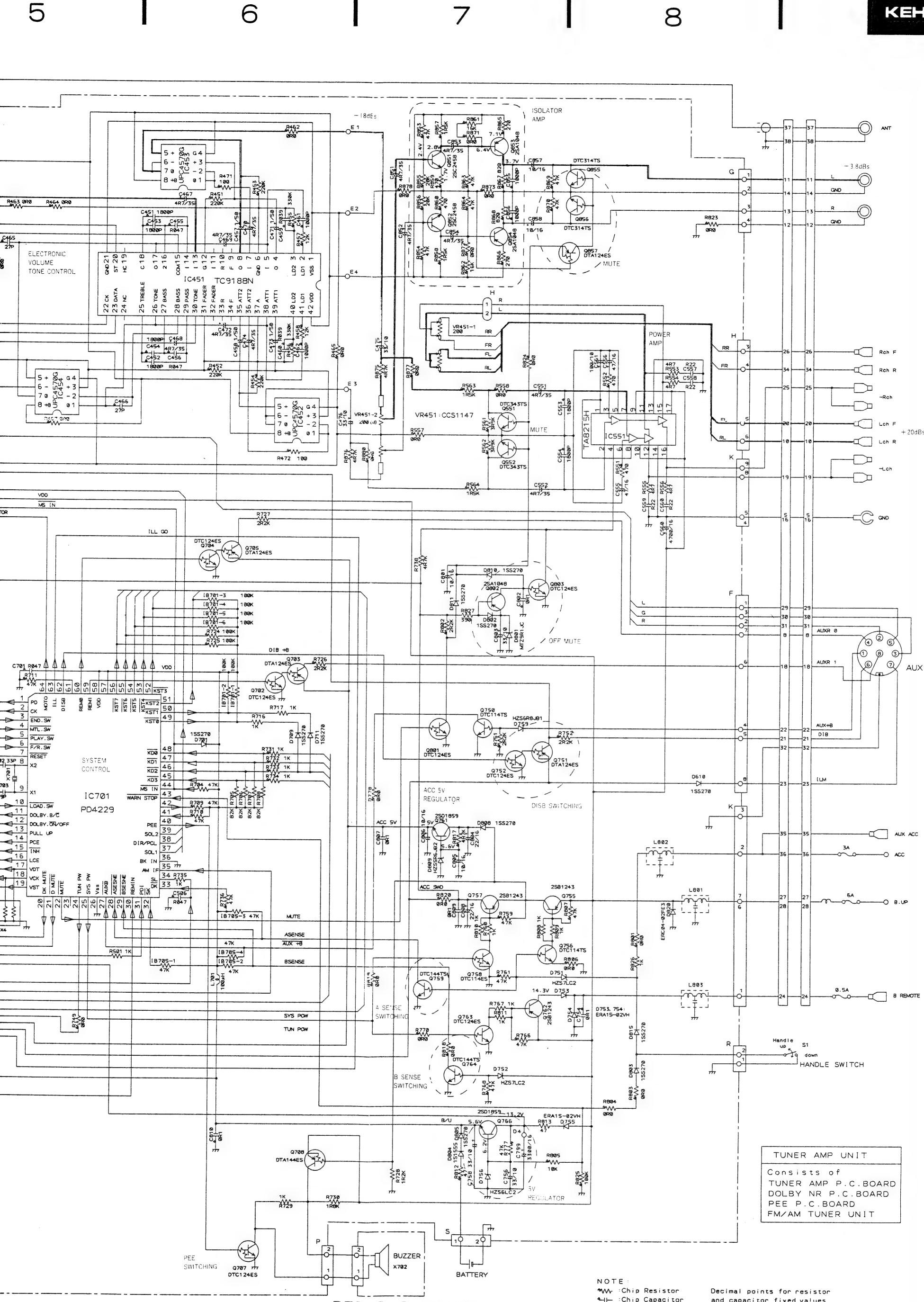
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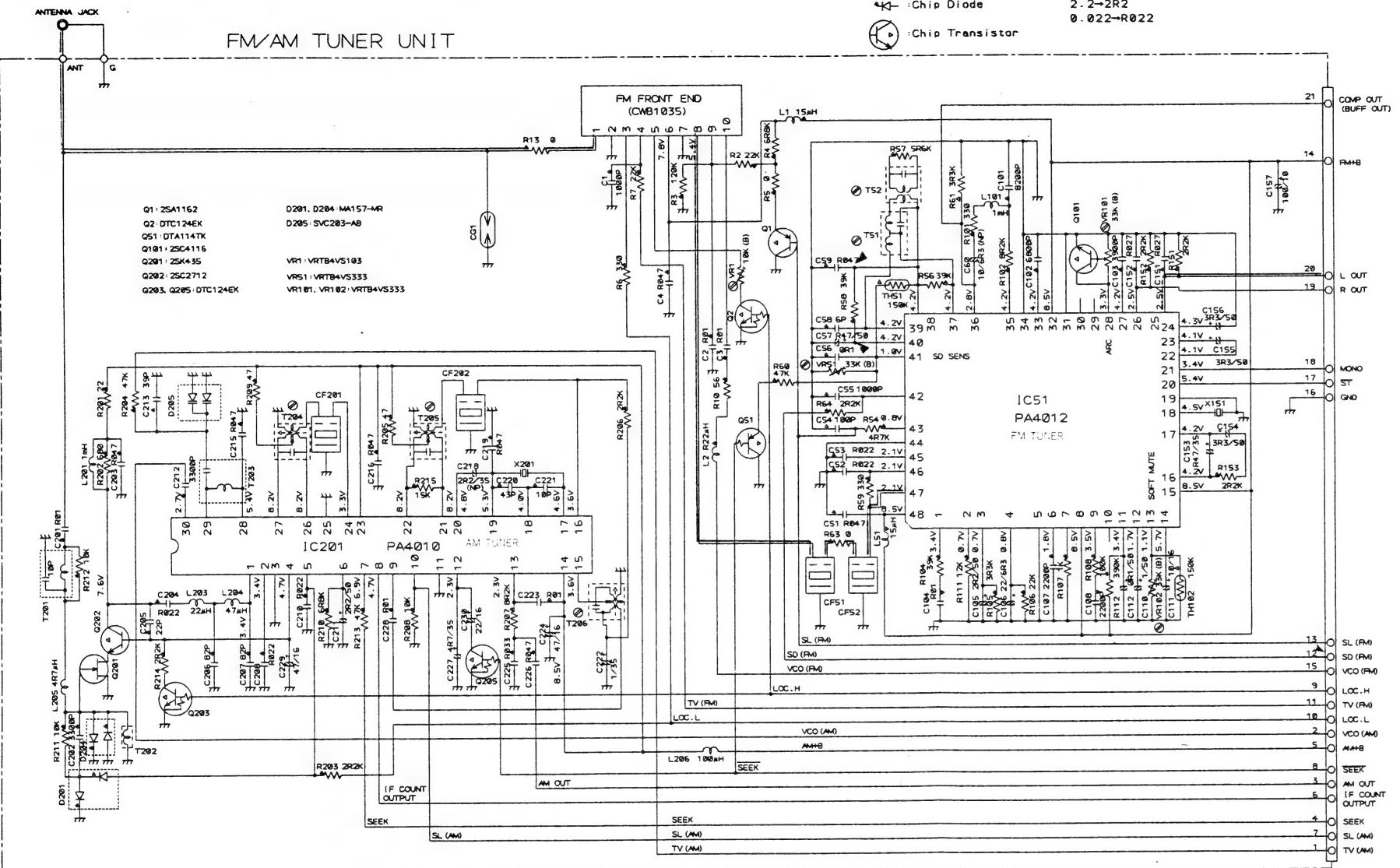
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19. CIRCUIT DIAGRAM AND P.C. BOARDS PATTERN

19.1 FM/AM TUNER UNIT (KEH-8100SDK)



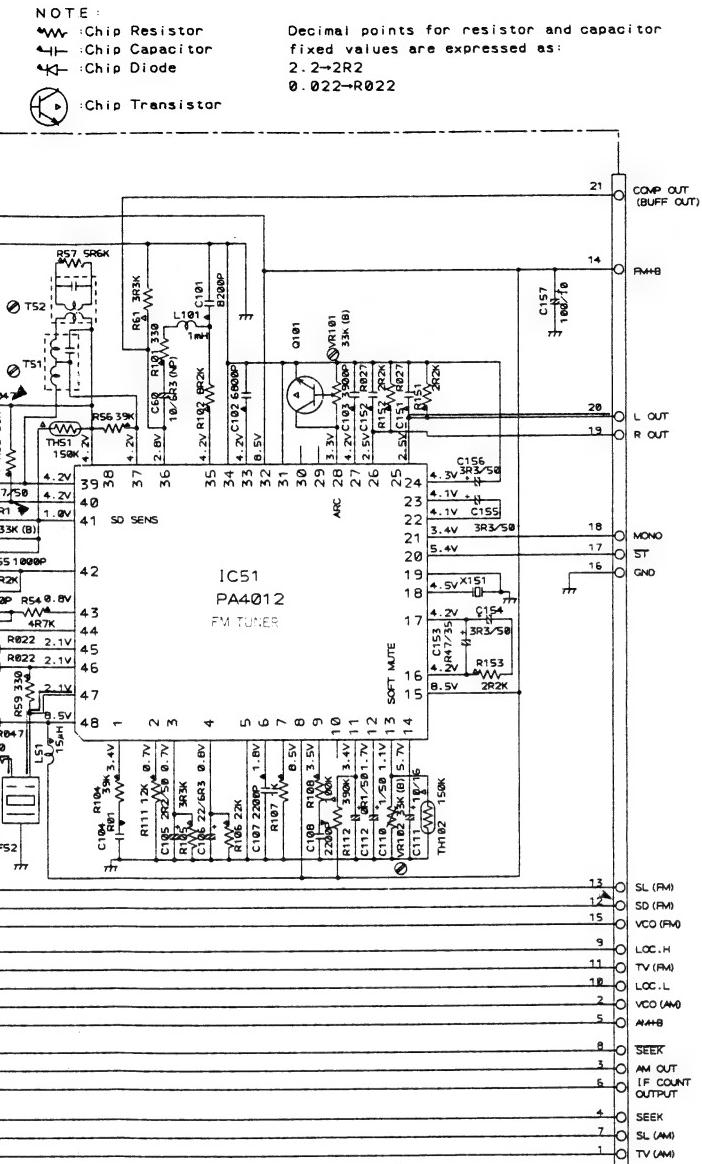


Fig. 19

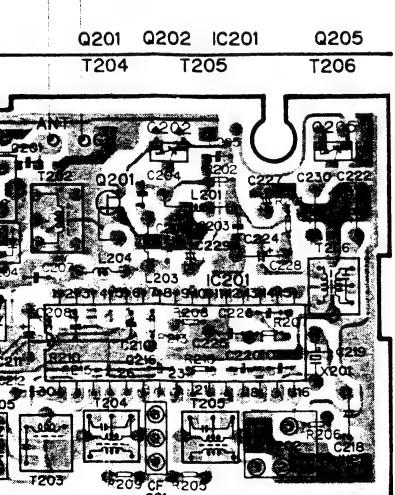


Fig. 20

19.2 FM/AM TUNER UNIT (KEH-8100B,8101B)

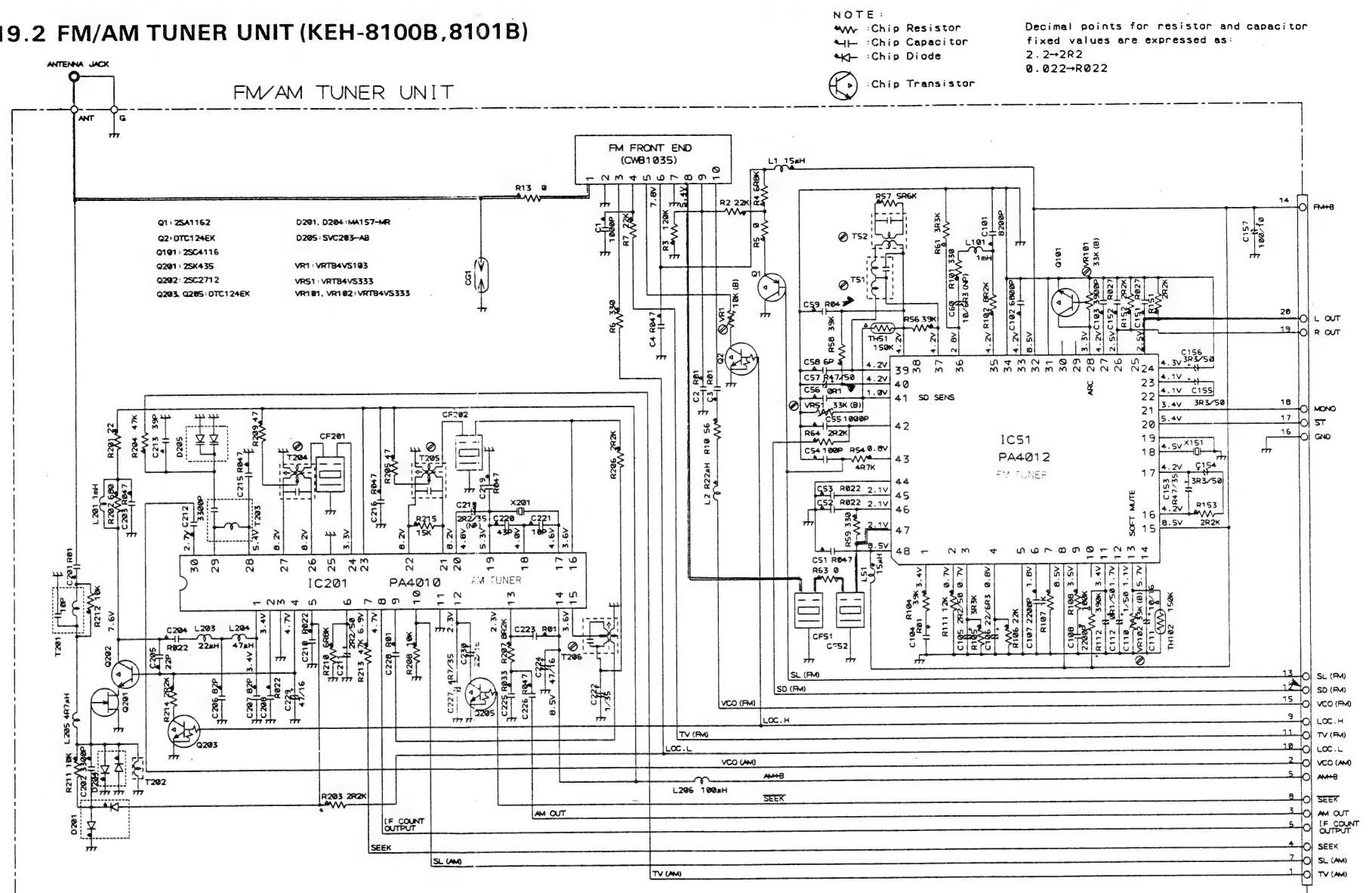


Fig. 21

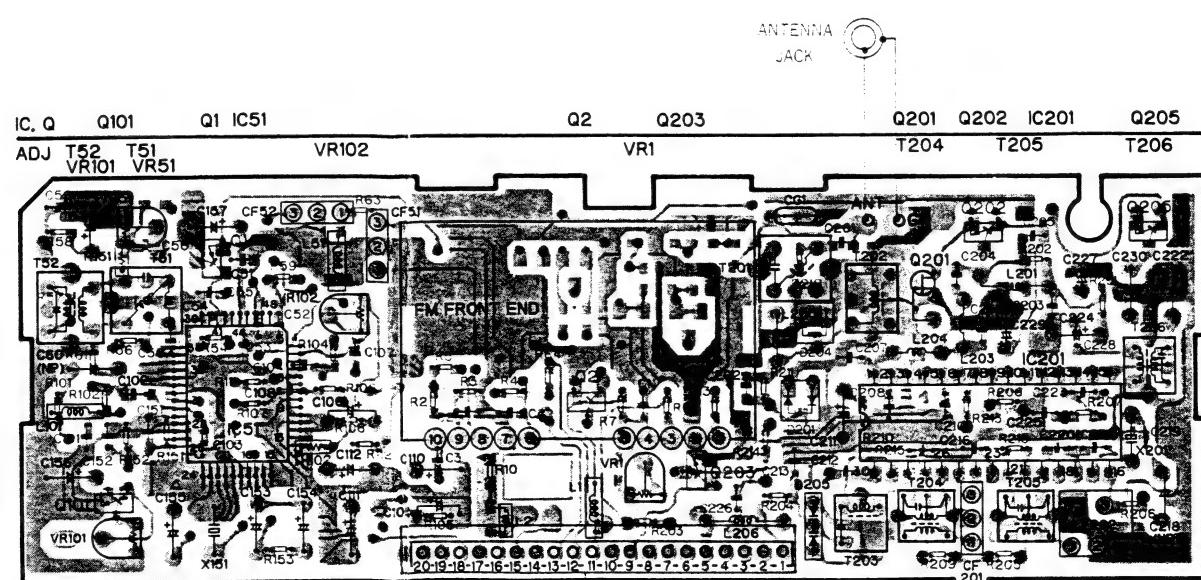
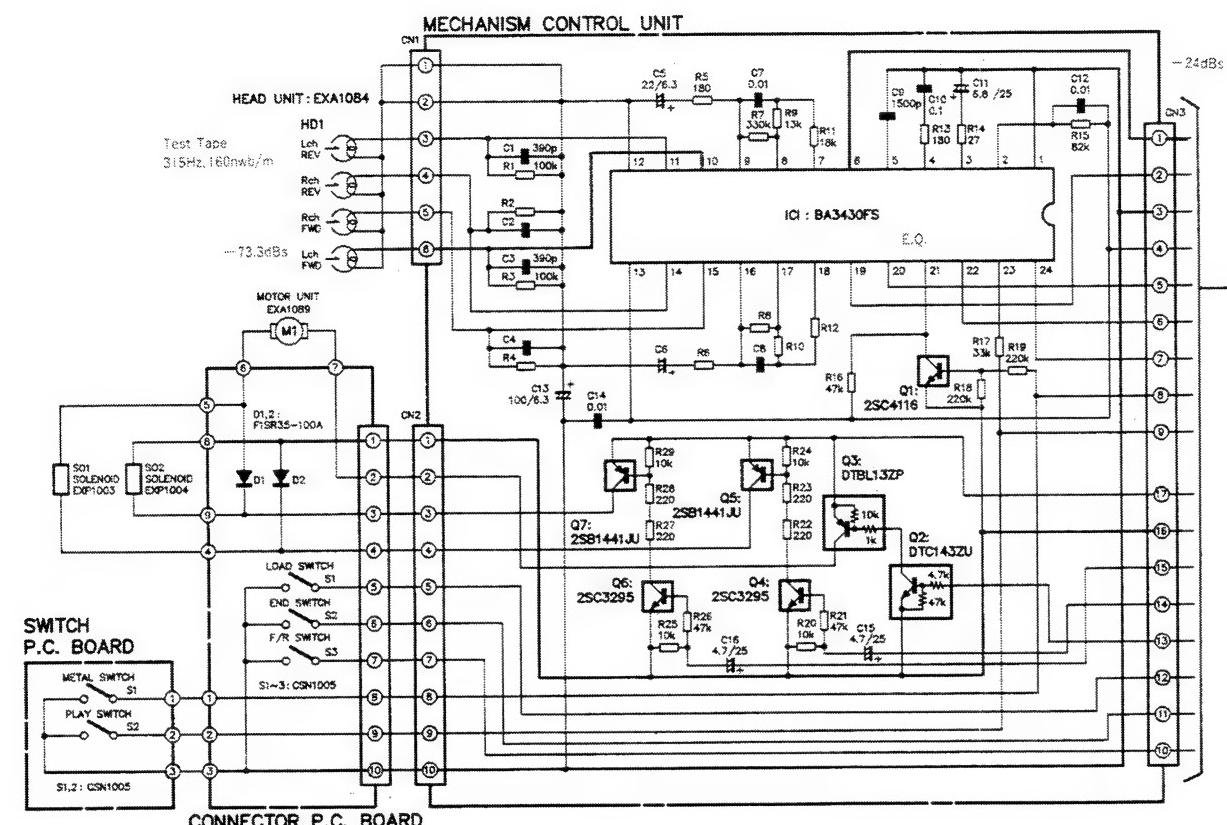


Fig. 22

19.5 CASSETTE MECHANISM SECTION



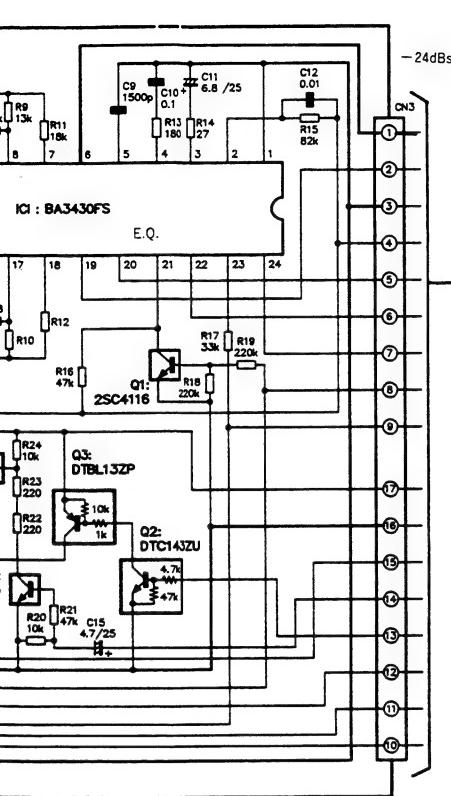
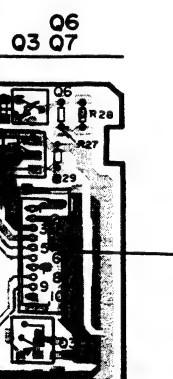
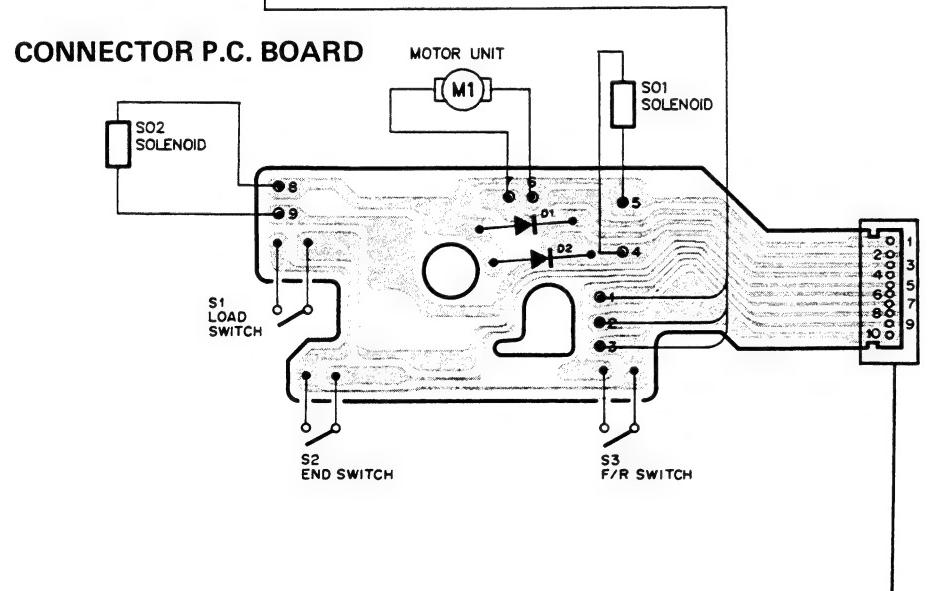


Fig. 27

Mechanism Control Unit	KEH-8100SDK KEH-8100B KEH-8101B KEH-8100QR KEH-8150QR/ES	KEH-700QR KEH-8150QR/CA
Symbol & No.	Part No.	Part No.
R1-4	RS1/10S104J	RS1/10S153J

CONNECTOR P.C. BOARD



TO TUNER AMP P.C.BOARD B

Fig. 28

20. EXPLODED VIEW

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- Parts marked by "◎" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

● Parts List (KEH-8100SDK, 8100B, 8101B, 8100QR)

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Remote Control Assy	CXA3281	28	Cushion	
	(KEH-8100B, 8101B)		29	Stopper	
	Remote Control Assy	CXA3283	30	Spacer	
	(KEH-8100QR)		31	Button	
2	Cover (KEH-8100B, KEH-8101B, 8100QR)	CZN3224	32	Button	CAC1987
			33	Lens	CNV2248
3	Screw	BMZ26P050FMC	34	Cushion	
◎ 4	Cassette Mechanism Assy	EXK1410	35	Film	
◎ 5	Mechanism Control Unit	CWM1967	36	Button	CAC2145
6	Connector		37	Button	CAC2142
7	Connector		38	Button	CAC2144
8	Connector		39	Button	CAC2143
9	Screw	CBA1022	40	Knob	CAA1199
◎ 10	Key Board Unit (KEH-8100SDK, 8100B)	CWS1163	41	Grille Unit (KEH-8100SDK)	CXA3028
	Key Board Unit (KEH-8101B)	CWS1154		Grille Unit (KEH-8100B)	CXA3029
	Key Board Unit (KEH-8100QR)	CWS1152		Grille Unit (KEH-8101B)	CXA3030
11	Screw	BPZ20P060FMC	42	Grille Unit (KEH-8100QR)	CXA3031
12	P. C. Board	CNP2217	43	Spring	CBH1129
13	P. C. Board	CNP2216	44	Door (KEH-8100SDK, KEH-8100B, 8101B)	CAT1223
14	Lamp	CEL-147	45	Door (KEH-8100QR)	CAT1272
15	Spacer	CNM1642	46	.....
16	.....		47	Shaft	
17	Lamp (KEH-8100SDK, KEH-8100B, 8101B)	CEL1013	48	Button	CAC2211
	Lamp (KEH-8100QR)	CEL1025		CAC2212	
18	Bush	CNV-724	49	Button	CAC2213
19	.....		50	Button	CAC2214
20	IC	BX-1393	51	Button	CAC2215
21	Lamp	CEL1115	52	Button	CAC2216
22	Housing	CNV2251	53	Button	CAC1997
23	Lens	CNV2249	54	Antenna Jack	CKX1010
24	Plate		55	Insulator	
25	LCD	CWA1070	56	FM Front End	CWB1035
26	Insulator		57	Plug (21P) (KEH-8100SDK, KEH-8100B, 8101B, KEH-8100QR)	
27	Holder				

Mark No.	Description	Part No.
58	Holder	
59	Holder	
⑥ 60	FM/AM Tuner Unit (KEH-8100SK)	CWE1166
	FM/AM Tuner Unit (KEH-8100B)	CWE1167
FM/AM Tuner Unit (KEH-8101B)	CWE1182	
FM/AM Tuner Unit (KEH-8100QR)	CWE1169	
⑥ 61	Tuner Amp Unit (KEH-8100SK)	CWM2056
	Tuner Amp Unit (KEH-8100B)	CWM2057
	Tuner Amp Unit (KEH-8101B)	CWM2060
Tuner Amp Unit (KEH-8100QR)	CWM2061	
62		
63		
64	Screw	BMZ30P120FMC
65	Heat Sink	
	(KEH-8100SDK, 8100B, 8100QR)	
	Heat Sink (KEH-8101B)	
66	IC	TA8215H
67	Holder	
68	Volume	CCS1147
69	Clamper	
70	Connector	
71	Buzzer	CPV1009
72	Plug	
73	Holder	
74	Connector	
75	Connector	CKS1262
76	Connector	CKS1254
77	Clamper	
78	Plug	
79	Cord Assy	CDE2526
	(KEH-8100SDK, 8100B, 8100QR)	
	Cord Assy	CDE2529
	(KEH-8100QR)	
80	Box (KEH-8100SDK, KEH-8100B, 8100QR)	CNB1289
	Box (KEH-8101B)	CNB1331
81	Connector	
82	Connector	

Mark No.	Description	Part No.
83	Screw	BMZ30P060FMC
84	IC	TA8214K
85	Holder	
86	Connector	
87	Connector	
88	Holder	
89	Plug	
90	Connector	
91	Connector	
92	Connector	
93	Screw	BMZ26P040FMC
94	Screw (KEH-8100SDK, KEH-8100B, 8100QR)	BMZ30P050FMC
	Screw (KEH-8101B)	BSZ30P040FMC
95	Clamper	
96	Screw	CBA1073
97	Cord Assy	CDE2527
	(KEH-8100SDK, 8100B, KEH-8101B)	
	Cord Assy	CDE2536
	(KEH-8100QR)	
98	Case (KEH-8100SDK, KEH-8100B, 8100QR)	
	Case (KEH-8101B)	
⑥ 99	Quick Release Handle Assy	CXA3186
100	Panel	
101	Cover	
102	Button	CAC2165
103	Screw	CMZ50P080FMC
104	Handle Unit	CXA3214
105	Handle	CNC3197
106	Insulator (KEH-8100SDK, KEH-8100B, 8100QR)	
	Insulator (KEH-8101B)	
107	Handle Unit	CXA3215
108	Cover	CNS1807
109	Terminal	CKF1015
110	Holder Unit	
111	Connector	
112	Insulator (KEH-8100SDK, KEH-8100B, 8100QR)	
	Insulator (KEH-8101B)	
113	Screw	BMZ30P060FMC
114	Screw	BMZ30P050FMC

Mark No.	Description	Part No.
115	Chassis Unit (KEH-8100SDK)	
	Chassis Unit (KEH-8100B, 8101B)	
	Chassis Unit (KEH-8100QR)	
116	Connector	
117	Screw	CBA-172
118	Switch	CSN-078
119	Holder	

NSP:No Spear Part

	KEH-8100QR/US	KEH-8150QR/ES	KEH-700QR/US	KEH-8150QR/CA
Mark No.	Description	Part No.	Part No.	Part No.
1	Remote Control Assy	CXA3283	CXA3281	CXA3284
⑥ 4	Cassette Mechanism Assy	EXK1410	EXK1410	EXK1420
⑥ 5	Mechanism Control Unit	CWM1967	CWM1967	CWM1968
41	Grille Unit	CXA3031	CXA3033	CXA3171
43	Door	CAT1272	CAT1223	CAT1270
⑥ 60	FM/AM Tuner Unit	CWE1169	CWE1168	CWE1169
⑥ 61	Tuner Amp Unit	CWM2061	CWM2058	CWM2059
86	Connector (5P) Connector (6P)	NSP	NSP	.....
90	Connector (8P) Connector (9P)	NSP	NSP	.....
91	Connector (8P) Connector (9P)	NSP	NSP	.....

• Exploded View

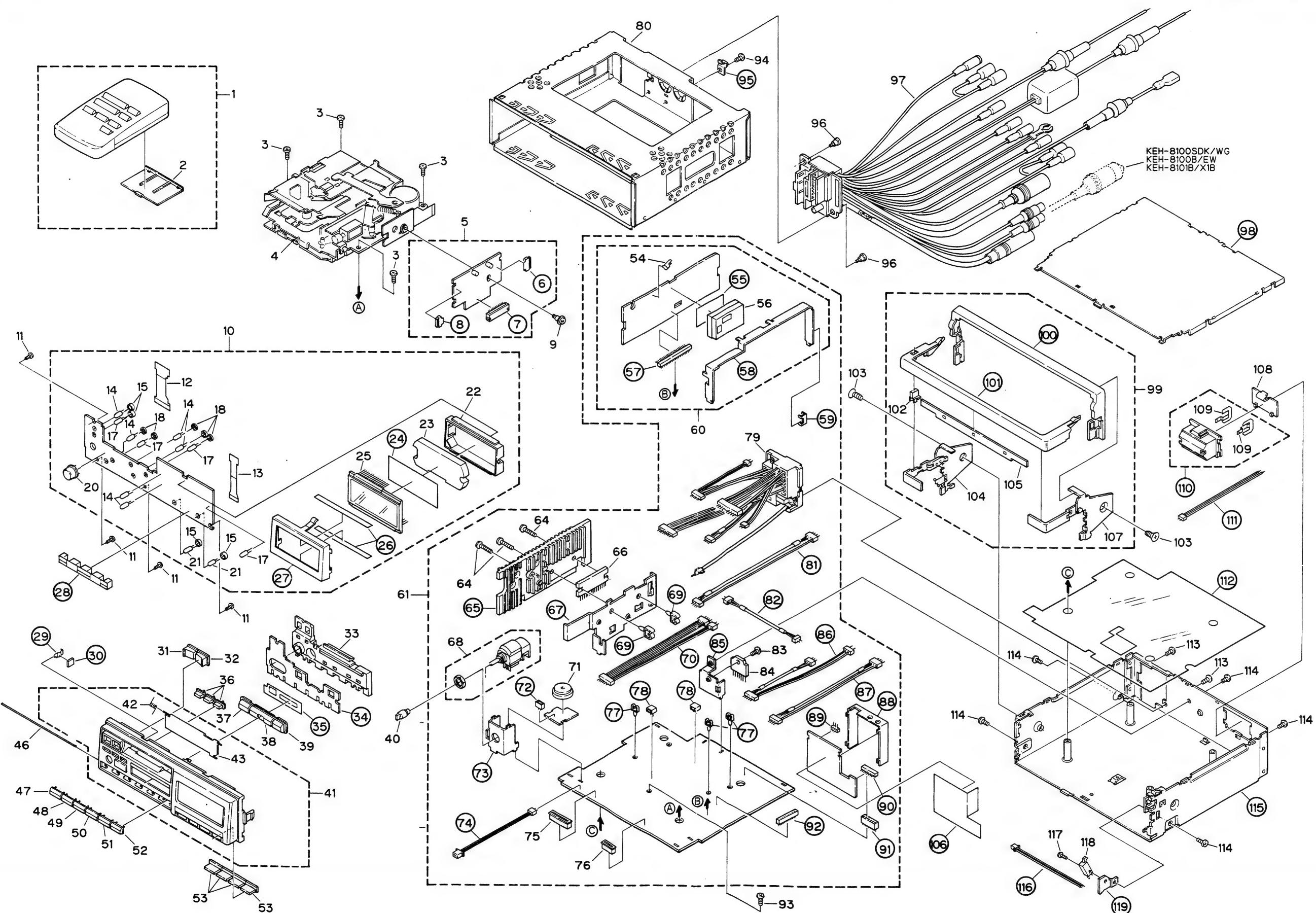


Fig. 29



21. CASSETTE MECHANISM ASSY EXPLODED VIEW

● Parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1 Lever	ENV1124		36 Washer	CBF1038	
2 Arm Unit	EXA1081		37 Gear	ENV1115	
3 Spring	EBH1152		38 Lever Unit	EXA1074	
4 Cassette Holder	ENC1165		39 Gear	ENV1107	
5 Roller	ELA1148		40 Roller	ELA1146	
6 Washer	CBF1037		41 Head Base Unit	EXA1071	
7 Screw	BMZ20P030FMC		42 Roller	ELA1147	
8 Cover			43 Spring	EBH1131	
9 Screw	EBA1016		44 Arm	ENV1121	
10 Spring	EBL1011		45 Lever Unit		
11 Spacer	ENV1105		46 Spring	EBH1153	
12 Screw	BMZ20P025FMC		47 Washer	YE20FUC	
13 Spring	EBH1145		48 Arm		
14 Washer	EBE1005		49 Pinch Roller Unit	EXA1072	
15 Screw	HBA-175		50 Spring	EBH1133	
16 Head Unit (KEH-8100SDK, 8100B, KEH-8101B, 8100QR, KEH-8150QR/ES)	EXA1084		51 Lever		
Head Unit (KEH-700QR, 8150QR/CA)	EXA1087		52 Screw	CBA1076	
17 Arm			53 P.C. Board		
18 Arm			54 Switch	CSN1005	
19 Spring	EBH1143		55 Screw	CBA1070	
20 Lever Unit			56 Spring	EBH1147	
21 Arm			57 Lever		
22 Washer	YE15FUC		58 Screw	PMS20P025FMC	
23 Spring	EBH1154		59 Motor Unit	EXA1089	
24 Arm Unit			60 Lever		
25 Spring	EBH1138		61 Spring	EBH1149	
26 Arm	ENV1122		62 Lever		
27 Spring	EBH1142		63 Gear	ENV1106	
28 Pinch Roller Unit	EXA1073		64 Chassis Unit		
29 Spring	EBH1134		65 Arm Unit	EXA1082	
30 Arm			66 Arm		
31 Spring	EBH1144		67 Spring	EBH1146	
32 Arm			68 Clamper		
33 Collar	ENV1117		69 Solenoid	EXP1004	
34 Spring	EBH1155		70 Spring	EBH1157	
35 Gear	ENV1116		71 Spring	EBH1151	
			72 Spring	EBH1148	
			73 Spring	EBH1135	
			74 Gear	ENV1118	
			75 Guide Unit		

Mark No.	Description	Part No.	Mark No.	Description	Part No.
76 Screw	PMS20P022FUC		96 Gear	ENV1108	
77 Bracket			97 Collar	ELA1151	
78 P.C. Board			98 Arm Unit		
79 Arm			99 Spring	EBH1141	
80 Spring	EBH1158		100 Gear	ENV1114	
81 Clamper			101 Arm		
82 Roller	ELA1149		102 Spring	EBH1140	
83 Gear	ENV1111		103 Flywheel	ENV1127	
84 Solenoid	EXP1003		104 Flywheel	ENV1128	
85 Gear	ENV1109		105 Spring	EBH1169	
86 Collar	ELA1152		106 Arm	ENV1130	
87 Gear	ENV1110		107 Collar	ELA1155	
88 Arm			108 Screw	HBA-183	
89 Spring	EBH1136		109 E Type Washer	CBG1003	
90 Arm			110 Washer	HBF-179	
91 Lever			111 Belt	ENT1011	
92 Spring	EBH1137		112 Cover		
93 Gear	ENV1112		113 Lever		
94 Gear Unit	EXA1083		114 Arm Unit		
95 Gear	ENV1113		115 Spring	EBH1139	

1

2

3

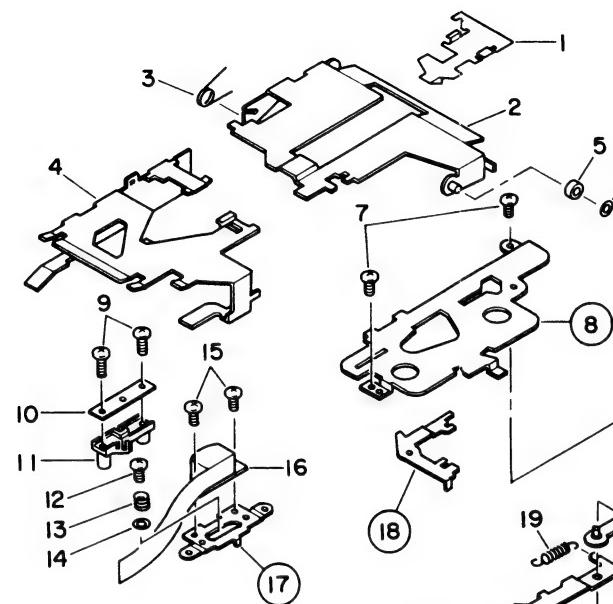
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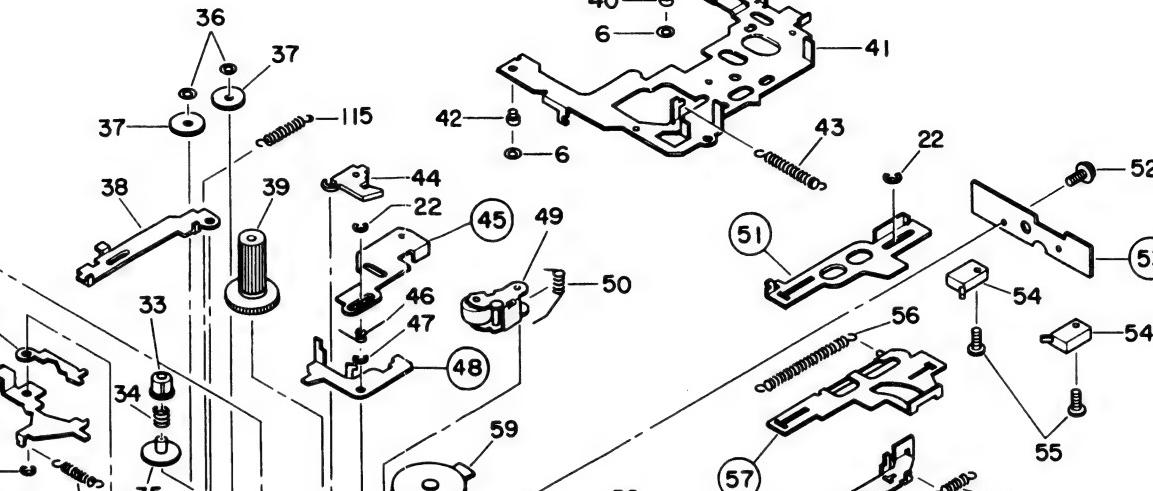
6

● Cassette Mechanism Assy

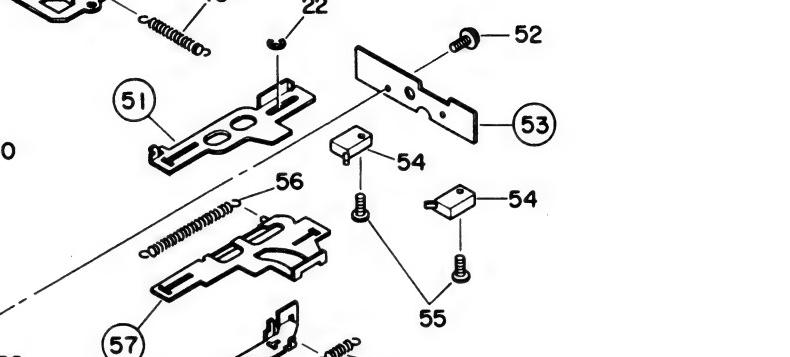
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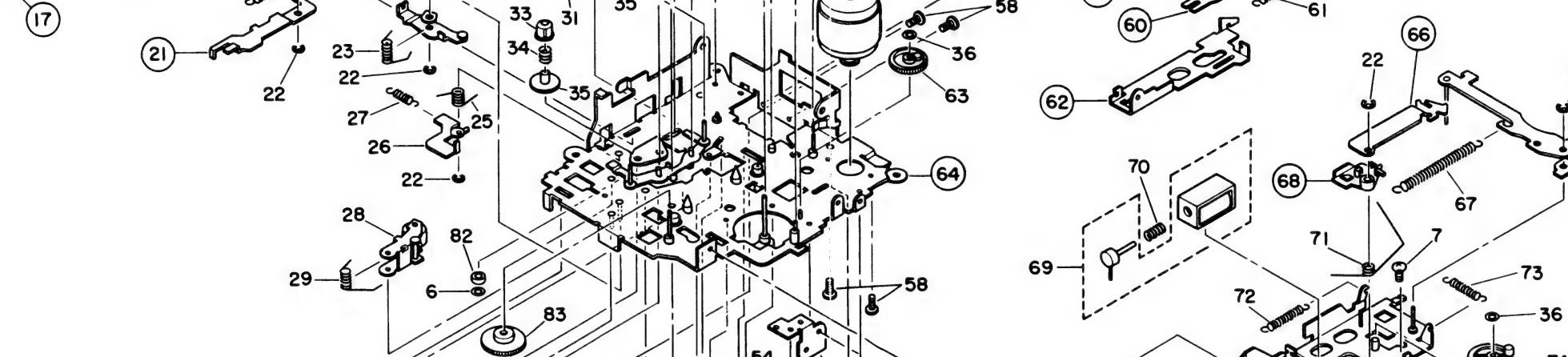
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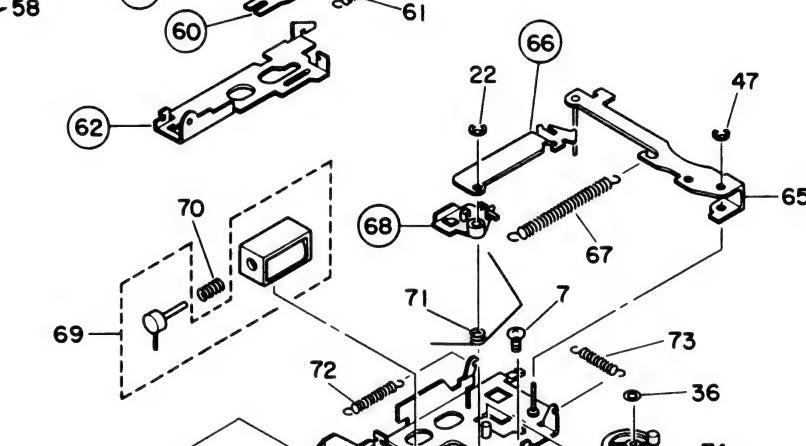
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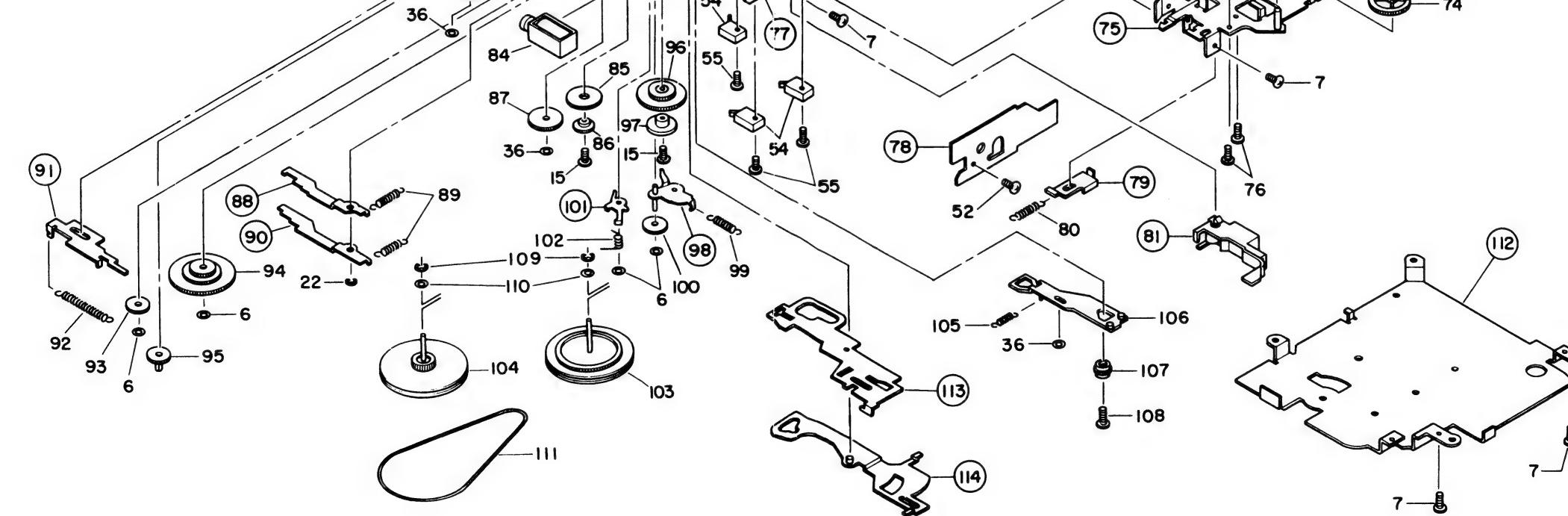
C



B



D



C

D

Fig. 30

22. PACKING METHOD

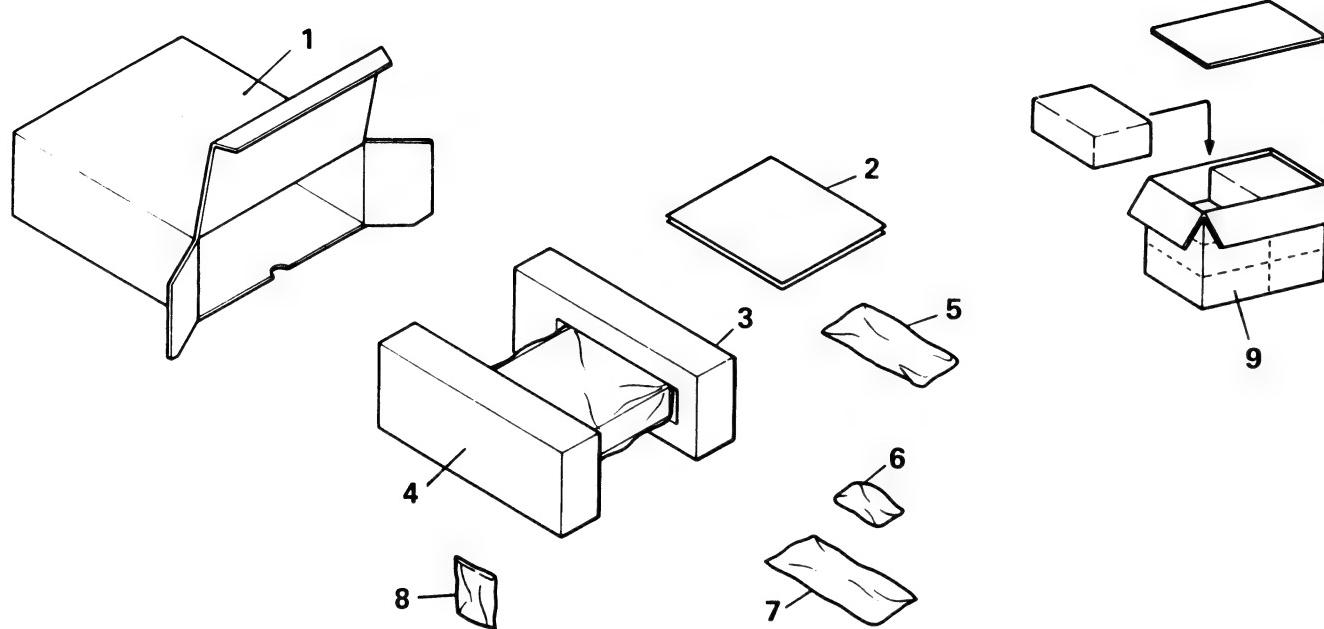


Fig. 31

● Parts List

		KEH-8100 SDK/WG	KEH-8100B/ EW	KEH-8101B /X1B	KEH-8150QR /ES	KEH-8100QR /US	KEH-700QR /US	KEH-8150QR /CA
Mark	No.	Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.
*	1	Carton	CHG1683	CHG1684	CHG1719	CHG1681	CHG1680	CHG1679
	2-1	Owner's Manual	CRD1316	CRD1317	CRD1338	CRD1319	CRB1139	CRD1320
	2-2	Caution Card	NSP	.....	.....	.....	.....	.....
	2-3	Caution Card	NSP	NSP	NSP	NSP	NSP	NSP
	2-4	Card	NSP	NSP	.....	.....	.....	.....
	2-5	Passport	NSP	.....	.....	.....	.....	.....
	2-6	Card	.....	.....	NSP	.....	.....	.....
	2-7	Card	.....	.....	.....	NSP	NSP	NSP
	3	Styrofoam	CHP1254	CHP1254	CHP1262	CHP1254	CHP1254	CHP1254
*	4	Styrofoam	CHP1253	CHP1253	CHP1261	CHP1253	CHP1253	CHP1253
	5	Accessory Assy	CEA1471	CEA1471	CEA1488	CEA1472	CEA1471	CEA1471
	6	Remote Control Assy	.....	CXA3281	CXA3281	CXA3281	CXA3283	CXA3283
	7-1	Cord Assy	.....	.....	.....	CDE2536	.....	.....
	7-2	Clamper	.....	.....	.....	NSP	.....	.....
	7-3	Screw	.....	.....	.....	BMZ30P 050FMC	.....	.....
*	8	Accessory Assy	CEA1473	CEA1489	CEA1492	CEA1492	CEA1492	CEA1492
	9	Contain Box	CHL1680	CHL1679

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* 2-1 Owner's Manual

Part No.	Model	Language
CRD1316	KEH-8100SDK/WG	German, French
CRD1317	KEH-8100B/EW	English, French, German, Spanish
CRD1318	KEH-8100B/EW	Swedish, Norwegian, Dutch, Finnish
CRD1338	KEH-8101B/X1B	English, French, Italian
CRD1319	KEH-8150QR/ES	English, French, Spanish, Arabic
CRB1139	KEH-8100QR/US	English
CRB1138	KEH-700QR/US	English
CRD1320	KEH-8150QR/CA	English, French

KEH-8100SDK/WG, KEH-8100B/EW, KEH-8100QR/US,
KEH-700QR/US, KEH-8150QR/CA

KEH-8101B/X1B

* 5 Accessory Assy CEA1471

Mark No.	Description	Part No.
5-1	Screw(×1)	CBA-102
5-2	Screw(×1)	CBA1002
5-3	Strap	CNF-111
5-4	Bush	CNV1009
5-5	Nut(×2)	NF50FMC

* 5 Accessory Assy CEA1488

Mark No.	Description	Part No.
5-1	Screw(×1)	CBA-102
5-2	Screw(×1)	CBA1002
5-3	Bracket	CNF-975
5-4	Bush	CNV1009
5-5	Nut(×2)	NF50FMC

KEH-8150QR/ES

* 5 Accessory Assy CEA1472

Mark No.	Description	Part No.	Mark No.	Description	Part No.
5-1	Screw Assy	PMZ26P030FZK	5-3	Strap	CNF-111
5-1-1	Screw(×1)	BMZ50P080FMC	5-4	Bush	CNV1009
5-1-2	Screw(×4)				
5-1-3	Screw(×1)	CBA-102			
5-1-4	Screw(×1)	CBA1002			
5-1-5	Screw(×2)	CBA1073			
5-1-6	Nut(×2)	NF50FMC			
5-2	Accessory Assy	CEA1481			
5-2-1	Escutcheon				
5-2-2	Escutcheon				

KEH-8100SDK

KEH-8100B/EW

*8 Accessory Assy CEA1473		
Mark No.	Description	Part No.
8-1	Battery	CEX1006
8-2	Fastener (Rough Surface)	CNM1716
8-3	Fastener (Soft Surface)	CNM1717

KEH-8101B/X1B

*8 Accessory Assy CEA1489		
Mark No.	Description	Part No.
8-1	Battery	CEX1006
8-2	Fastener (Rough Surface)	CNM1841
8-3	Fastener (Soft Surface)	CNM1842

KEH-8150QR/ES, KEH-8100QR/US, KEH-700QR/US,
KEH-8150QR/CA

*8 Accessory Assy CEA1492		
Mark No.	Description	Part No.
8-1	Battery	CEX1006
8-2	Battery	CEX1010
8-3	Fastener (Rough Surface)	CNM1716
8-4	Fastener (Soft Surface)	CNM1717

23. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/8S □□□J, RS1/10S □□□J

Chip Capacitor (except for CQS.....)

CKS..... CCS..... CSZS.....

Tuner Amp Unit
Consists of
• Tuner Amp P.C. Board
• Dolby NR P.C. Board
• PEE P.C. Board
• FM/AM Tuner Unit

Unit Number :

Unit Name : Tuner Amp Unit(KEH-8100SDK, KEH-8100B, KEH-8101B)

MISCELLANEOUS

Mark	Circuit Symbol & No.	Part Name	Part No.	Mark	Circuit Symbol & No.	Part Name	Part No.
IC 301	HA12134	D 753 754 755		ERA15-02VH			
IC 451	TC9188N	D 756		HZS6LC2			
IC 452 453 454	UPC4570G	D 759		HZS6R8JB1			
IC 501	LC7218	D 801		MT29R1JC			
IC 502 (KEH-8100SDK)	KHA142	D 802 805 808 810 811		ISS270			
IC 551	TA8215H	D 804		IS1555			
IC 601	TA75558P	D 809		HZS5R6JB2			
IC 701	PD4229	D 820		ERC04-02FE3			
IC 702	S-8053AN0	L 501	Ferrri-Inductor	LAU2R2M			
IC 703	TA8214K	L 701	Ferrri-Inductor	LAU101K			
Q 301 302 603 605 606 607 608 611 855 856	DTC314TS	L 801 802 803		CCG1003			
Q 303 503 506 604 702 704 706 707 752	DTC124ES	IB 701		CWW1274			
Q 501	2SC2498	IB 702		CWW1276			
Q 502 761 766	2SD1859	IB 703 704 705		CWW1048			
Q 504	2SK330	X 501	Crystal Resonator	CSS1030			
Q 505 507 510 601 602	2SC2458	X 502 (KEH-8100SDK)	Ceramic Resonator	CSS1019			
Q 508 (KEH-8100SDK)	2SC2458	X 701	Crystal Resonator	CSS1023			
Q 509	2SC3113	X 702	Buzzer	CPV1009			
Q 551 552	DTC343TS	VR 301 302	Semi-fixed 33kΩ (B)	CCP-381	R 609 610 869 870		
Q 701 703 705 751 857	DTA124ES	VR 451	Volume 200Ω, 200Ω (M)	CCS1147	R 611 612 617 618		
Q 750 756	DTC114TS		FM/AM Tuner Unit (KEH-8100SDK)		R 623 624 627 628		
Q 755 757 762	2SB1243		FM/AM Tuner Unit (KEH-8100B)		R 630 802		
Q 758	DTC114ES		FM/AM Tuner Unit (KEH-8101B)		R 633		
Q 759 764	DTC144TS				R 634		
Q 763 801 803	DTC124ES	RESISTORS			R 651 652 653 743 818 819 820 822 824		
Q 802	2SA1048	Mark	Circuit Symbol & No.	Part Name	R 654		
Q 851 852	2SC2458				R 702		
Q 853 854	2SA1048	R 301		RD1/4PS183JL	R 705 706 707 708		
D 501	HZS6R2JB2	R 302 309		RD1/4PS223JL	R 711 736		
D 502	HZS3R0EB2	R 303 304 310		RD1/4PS103JL	R 712 713		
D 503 504 505 601 604 605 606 607 610	ISS270	R 305 306		RD1/4PS222JL	R 716 (KEH-8100SDK)		
D 608	MT24R7JB	R 307 308		RD1/4PS563JL	R 724 725		
D 701 702 703 704 705 706	ISS270	R 311		RD1/4PS102JL	R 730		
D 710 (KEH-8100SDK)	ISS270	R 451 453 454		RS1/10S473J	R 738 875 876		
D 751 752	HZS7LC2	R 452		RS1/10S224J	R 740		
		R 455 456		RS1/8S224J	R 745 767 811		
		R 457 458		RS1/10S334J	R 751 752		
				RS1/10S123J	R 759 761 766 777 807		

Mark	Circuit Symbol & No.	Part Name	Part No.	Mark	Circuit Symbol & No.	Part Name	Part No.
R 462 463 464 465 466 467		RS1/10S0R0J	R 760 810	R 471 472	RS1/10S101J	R 768	RD1/4PS102JL
R 501 526 729 735		RD1/4PS102JL	R 779	R 502 503 504 701 715 737	RD1/4PM102J	R 792 793	RD1/4PM222J
R 505 509		RS1/8S472J	R 801 806 877 878 880	R 506 709 710	RS1/10S473J	R 808 809	RD1/4PS681JL
R 507		RS1/10S563J	R 812	R 508 521 527 530 531	RS1/10S472J	R 813	RD1/4PS470JL
R 510		RS1/10S471J	R 817	R 511 825	RS1/10S104J	R 826	RD1/4PS472J
R 512		RS1/10S470J	R 827	R 513 514	RS1/10S101J	R 827	RD1/4PS391JL
R 515		RS1/10S182J	R 853 854	R 516	RS1/10S821J	R 855 856	RS1/10S203J
R 518		RS1/10S472J	R 857 858	R 519	RS1/10S221J	R 863 864	RS1/10S154J
R 520		RS1/10S474J	R 865 866	R 522 541 718 719 720 721 722 723 727	RD1/4PS222JL	R 867 868 873	RS1/10S222J
R 523 726		RS1/10S222J	R 871 872	R 524 731 732 733 734	RS1/10S102J	R 871 872	RS1/10S392J
R 525		RS1/10S152J		R 528	RS1/8S103J		CAPACITORS
R 529 704		RD1/4PS473JL		R 533 534	RD1/4PS103JL	C 301 302 310	CEA010M50LS2
R 535 (KEH-8100SDK)		RD1/4PS474JL		R 537 (KEH-8100SDK)	C 303 304	CEAR33M50LS2	
R 538 (KEH-8100SDK)		RD1/4PS473JL		R 539 540	RD1/4PM4R7J	C 306 312	CEAR22M50LS2
R 539 540		RD1/4PS222JL		R 542	RS1/10S102J	C 307 308 801 857 858	CEA100M16LS2
R 540		RS1/10S473J		R 551 552 859 860	RS1/10S431J	C 309	CEA101M10LS
R 551 552 859 860		RS1/10S102J		R 553 555 556	RD1/4PS4R7JL	C 311	CEA220M10LS
R 553 555 556		RS1/10S152J		R 554	RD1/4PM4R7J	C 313	CKSQYF104Z25
R 554		RS1/8S152J		R 555 622 631 742 744 746 749 750 778	RS1/8S0R0J	C 451 452 453 454 553 554	CKSQYB182K50
R 555 622 631 742 744 746 749 750 778		RS1/10S102J		R 556	RS1/10S392J	C 455 456	CKSQYB473K25
R 556		RS1/10S152J		R 557 621 626 629 632	RS1/10S102J	C 457 458 471 473	CEA010M50LS2
R 557 621 626 629 632		RS1/10S102J		R 561 562	RS1/10S102J	C 459 460	CKSQYB393K25
R 561 562		RS1/10S102J		R 562	RS1/10S102J	C 461 462	CKSQYB102K50
R 562		RS1/10S152J		R 563	RS1/10S152J	C 465 466	CCSQCH270J50
R 563		RS1/10S152J		R 564	RS1/10S102J	C 467 468 469 470 472 474	CEA4R7M35LS
R 564		RS1/10S102J		R 570 605 606 607 608 714	RS1/10S102J	C 475 476 803	CEA330M10LS
R 570 605 606 607 608 714		RS1/10S114J		R 601 602	RS1/10S114J	C 501 506 517 701	CKSQYB473K25
R 601 602		RS1/8S102J		R 603 604	RS1/8S102J	C 502 504	CCSQCH101K50
R 603 604		RS1/10S223J		R 609 610 869 870	RS1/10S223J	C 503	CKSQYB561K50
R 609 610 869 870		RS1/10S563J		R 611 612 617 618	RS1/10S563J	C 505 510 512 516 518 519 520	CKSQYB103K50
R 611 612 617 618		RS1/10S473J		R 623 624 627 628	RS1/10S473J	C 507 527	CEA220M16LS
R 623 624 627 628		RS1/10S222J		R 630 802	RS1/10S222J	C 508 509	CCSQCH270J50
R 630 802</							

Mark ===== Circuit Symbol & No.	==== Part Name	Part No.	Mark ===== Circuit Symbol & No.	==== Part Name	Part No.
C 552 851 852 853 854		CEA4R7M35LS	C 610 612		CEA2R2M50LS2
C 555 556		CEHAQ470M25	C 611		CKSYF105Z25
C 557 558 559 560		COEA224J63	C 615 708 716 802 807 809 810		CKSQYF104Z25
C 560		CEA472M16L2	C 702		CCSOCH330J50
C 561		CEHAQ101M10	C 703		CCSOCH090D50
C 601 602 603 604		CEA2R2M50LS2	C 704		CEA2R2M50LS2
C 605 606		CCSOCH270J50	C 754		CKSYF104Z25
C 607		CEA221M10L2	C 756 758		CEA330M10LS
C 608 709		CEA470M16L2	C 799	3300 μF/16V	CCH1037
C 609 710 717	470 μF/10V	CCH1019	C 804 808		CEA220M16LS
			C 805 806		CEA100M16LS2
			C 855 856 859		CKSQYB102K50

Tuner Amp Unit	KEH-8100B/EW	KEH-8150QR/ES	KEH-8100QR/US	KEH-7000R/US KEH-8150QR/CA
Symbol & No.	Part No.	Part No.	Part No.	Part No.
FM/AM Tuner Unit	Marked by ②	.....	.....	.....
FM/AM Tuner Unit	.....	Marked by ②	.....	.....
FM/AM Tuner Unit	.....	.....	Marked by ②	Marked by ②
IC301	HA12134	HA12134	HA12134	.....
IC351	.....	.....	.....	BH-2405
0301, 302	DTC314TS	DTC314TS	DTC314TS	.....
0303	DTC124ES	DTC124ES	DTC124ES	.....
0351, 352	.....	.....	.....	DTC124ES
0353, 354	.....	.....	.....	DTC314TS
0355, 356	.....	.....	.....	DTC124ES
0503	DTC124ES	.....	.....	.....
0708	.....	.....	DTA144ES	DTA144ES
D707	.....	ISS270	.....	.....
D709	.....	.....	ISS270	ISS270
D711	.....	.....	.....	ISS270
D803, 815	.....	.....	ISS270	ISS270
L351, 352	.....	.....	.....	CTF1019
VR301, 302	CCP-381	CCP-381	CCP-381	.....
VR351, 352	.....	.....	.....	CCP-381
R301	RD1/4PS183JL	RD1/4PS183JL	RD1/4PS183JL	.....
R302, 309	RD1/4PS223JL	RD1/4PS223JL	RD1/4PS223JL	.....
R303, 304, 310	RD1/4PS103JL	RD1/4PS103JL	RD1/4PS103JL	.....
R305, 306	RD1/4PS222JL	RD1/4PS222JL	RD1/4PS222JL	.....
R307, 308	RD1/4PS563JL	RD1/4PS563JL	RD1/4PS563JL	.....
R312	.....	.....	.....	RS1/10S473J
R351	.....	.....	.....	RS1/10S822J
R352, 357	.....	.....	.....	RS1/8S0R0J
R353, 359	.....	.....	.....	RS1/10S222J
R354	.....	.....	.....	RS1/8S822J
R355	.....	.....	.....	RS1/8S563J
R356, 358	.....	.....	.....	RS1/10S0R0J
R360	.....	.....	.....	RS1/10S563J
R361, 362	.....	.....	.....	RS1/10S123J
R363	.....	.....	.....	RS1/10S103J
R364	.....	.....	.....	RS1/8S103J
R365	.....	.....	.....	RS1/8S473J
R522	RD1/4PS222JL	.....	.....	.....
R523	RS1/10S222J	RS1/10S472J	RS1/10S472J	RS1/10S472J

Tuner Amp Unit	KEH-8100B/EW	KEH-8150QR/ES	KEH-8100QR/US	KEH-700QR/US KEH-8150QR/CA
Symbol & No.	Part No.	Part No.	Part No.	Part No.
R551, 552, 859, 860	RS1/10S431J	RS1/10S471J	RS1/10S471J	RS1/10S471J
R716	.....	RD1/4PS102JL	RD1/4PS102JL	RD1/4PS102JL
R717	.....	.....	.....	RD1/4PS102JL
R728	.....	.....	RD1/4PS122JL	RD1/4PS122JL
R747	.....	.....	.....	RS1/10S0R0J
R770	.....	RS1/8S0R0J	RS1/8S0R0J	RS1/8S0R0J
R803, 804	.....	.....	RS1/10S0R0J	RS1/10S0R0J
R805	.....	.....	RS1/10S103J	RS1/10S103J
R822	RS1/10S0R0J	.....	.....	.....
R823	.....	RS1/10S0R0J	RS1/10S0R0J	RS1/10S0R0J
R853, 854	RS1/10S683J	RS1/10S473J	RS1/10S473J	RS1/10S473J
R861, 862	RS1/10S823J	RS1/10S163J	RS1/10S163J	RS1/10S163J
R863, 864	RS1/10S154J	RS1/10S473J	RS1/10S473J	RS1/10S473J
R865, 866	RS1/10S222J	RS1/10S271J	RS1/10S271J	RS1/10S271J
R867, 868	RS1/10S102J	RS1/10S821J	RS1/10S821J	RS1/10S821J
R869, 870	RS1/10S223J	RS1/10S473J	RS1/10S473J	RS1/10S473J
R871, 872	RS1/10S392J	RS1/10S0R0J	RS1/10S0R0J	RS1/10S0R0J
R873	RS1/10S102J	RS1/10S0R0J	RS1/10S0R0J	RS1/10S0R0J
C301, 302, 310	CEA010M50LS2	CEA010M50LS2	CEA010M50LS2	.....
C303, 304	CEAR33M50LS2	CEAR33M50LS2	CEAR33M50LS2	.....
C306, 312	CEAR22M50LS2	CEAR22M50LS2	CEAR22M50LS2	.....
C307, 308	CEA100M16LS2	CEA100M16LS2	CEA100M16LS2	.....
C309	CEA101M10LS	CEA101M10LS	CEA101M10LS	.....
C311	CEA220M10LS	CEA220M10LS	CEA220M10LS	.....
C351, 352, 355, 356	.....	.....	.....	CEA4R7M35LS
C353, 354	.....	.....	.....	CEA010M50LS2
C357, 358	.....	.....	.....	CEA101M10LS
C359	.....	.....	.....	CEA220M10LS
C513	CEAR47M50L2	.....	.....	.....
C859	CKSQYB102K50	.....	.....	.....

Unit Number :

Unit Name : FM/AM Tuner Unit(KEH-8100SDK/WG)

MISCELLANEOUS

Mark =====	Circuit Symbol & No.	==== Part Name	Part No.	Mark =====	Circuit Symbol & No.	==== Part Name	Part No.
IC 51			PA4012	T 201		Coil	CTB1020
IC 201			PA4010	T 202		Coil	CTB1004
Q 1	Chip Transistor		2SA1162	T 203		Coil	CTB1040
Q 2 203 205	Chip Transistor		DTC124EK	T 204		Coil	CTE1037
Q 51	Chip Transistor		DTA114TK	T 205		Coil	CTE1038
Q 101	Chip Transistor	2SC4116		T 206		Coil	CTE1039
Q 201		2SK435		CG 1		Surge Protector	DSP-201M
Q 202	Chip Transistor	2SC2712		TH 51 102		Thermister	DTN-T204D154K
D 201 204	Chip Diode	MA157-MR		CF 51 52		Ceramic Filter	CTF-182
D 205	Variable Capacitance Diode	SVC203-AB		CF 201		Ceramic Filter	CTF1041
L 1 51	Inductor	CTF1104		CF 202		Filter	CTF1085
L 2	Inductor	CTF1086		X 151		Ceramic Resonator	CSS1055
L 101	Inductor	CTF1126		X 201		Crystal Resonator	CSS1014
L 201	Inductor	CTF1084		VR 1		Semi-fixed 10kΩ (B)	VRTB4VS103
L 203	Ferri-Inductor	LAU220K		VR 51 101 102		Semi-fixed 33kΩ (B)	VRTB4VS333
L 204	Ferri-Inductor	LAU470K				FM Front End	CWB1035
L 205	Ferri-Inductor	LAU47K					
L 206	Ferri-Inductor	CTF-157					
T 51	Coil	CTE1021					
T 52	Coil	CTE1022					

RESISTORS

Mark	====	Circuit Symbol & No.	====	Part Name	Part No.	Mark	====	Circuit Symbol & No.	====	Part Name	Part No.
R	2	7 106			RS1/10S223J	C	203 215 216 219 226				CKSQYF473Z25
R	3				RS1/10S124J	C	204 208 210				CKSQYB223K25
R	4				RS1/10S682J	C	205				CCSQCH220J50
R	5	13 63			RS1/10S0R0J	C	206 207				CCSQCH820J50
R	6	59 101			RS1/10S331J	C	211				CEA2R2M50LL
R	10				RS1/10S560J	C	213				CCSQCH390J50
R	54				RS1/10S472J	C	218				CEA2R2M35NPLL
R	56	58 104			RS1/10S393J	C	220				CCSQCH430J50
R	57				RS1/10S562J	C	221				CCSQCH100D50
R	60				RS1/10S473J	C	222				CSZA010K35L
R	61	105			RS1/10S332J	C	224				CEA470M16LL
R	64				RS1/10S222J	C	225				CKSQYB333K25
R	102				RS1/10S822J	C	227				CEA4R7M35LS
R	107				RS1/10S102J	C	229				CEA470M16LS
R	108				RS1/10S104J	C	230				CEA220M16LL
R	111				RS1/10S123J						
R	112				RS1/10S394J						
R	151 152 153				RS1/10S222J						
R	201				RS1/10S220J						
R	202				RS1/10S681J						
R	203 206 214				RS1/10S222J						
R	204 213				RS1/10S473J						
R	205 209				RS1/10S470J						
R	207				RS1/10S822J						
R	208 211 212				RS1/10S103J						
R	210				RS1/10S682J						
R	215				RS1/10S153J						

CAPACITORS

Mark	====	Circuit Symbol & No.	====	Part Name	Part No.
C	1				CKSQYB102K50
C	2	3 104			CKSQYB103K50
C	4	51 59			CKSQYF473Z25
C	52	53			CKSQYB223K25
C	54				CCSQSL101J50
C	55				CKSQYB102K50
C	56				CKSQYF104Z25
C	57				CEAR47M50LS2
C	58				CCSQCH060D50
C	60				CEALNP100M6R3
C	101				CKSQYB822K50
C	102				CKSQYB682K50
C	103				CKSQYB392K50
C	105				CEA2R2M50LL
C	106				CEA220M6R3LL
C	107 108				CKSQYB222K50
C	110				CEA010M50LL
C	111				CEA100M16LL
C	112				CEA0R1M50LL
C	151 152				CKSQYB273K25
C	153				CSZAR47M35L
C	154 155 156				CEA3R3M50LL
C	157				CEA101M10LS
C	201 223 228				CKSQYB103K25
C	202 212				CKSQYB332K50

FM/AM Tuner Unit	KEH-8100SDK	KEH-8100B/EW	KEH-8150QR/ES	KEH-8100QR/US KEH-700QR/US KEH-8150QR/CA
Symbol & No.	Part No.	Part No.	Part No.	Part No.
Q3	.....	.....	.....	2SA1162
Q51	DTA114TK	.....	.....	.....
D11, 12	.....	.....	.....	1SV128A-BB
L2	CTF1086	CTF1086	.....	.....
L11, 12	.....	.....	.....	CTF1065
L201	CTF1084	CTF1084	CTF1026	CTF1026
VR1	VRTB4VS103	VRTB4VS103	VRTB4VS103	VRTB4VS104
R3	RS1/10S124J	RS1/10S124J	RS1/10S124J	RS1/10S683J
R8	.....	.....	.....	RS1/10S331J
R9	.....	.....	.....	RS1/10S223J
R10	RS1/10S560J	RS1/10S560J	RS1/10S0R0J	RS1/10S0R0J
R11	.....	.....	.....	RS1/10S104J
R12	.....	.....	.....	RS1/10S470J
R13	RS1/10S0R0J	RS1/10S0R0J	RS1/10S0R0J	.....
R14	.....	.....	RS1/10S0R0J	RS1/10S0R0J
R58	RS1/10S393J	RS1/10S393J	RS1/10S393J	RS1/10S223J
R60	RS1/10S473J	.....	.....	.....
R61	RS1/10S332J	RS1/10S332J	.....	.....
R101	RS1/10S331J	RS1/10S331J	RS1/10S471J	RS1/10S471J
R151, 152	RS1/10S222J	RS1/10S222J	RS1/10S152J	RS1/10S152J
C11-14	.....	.....	.....	CCSQCH220J50
C15	.....	.....	.....	CKSQYF223Z50
C57	CEAR47M50LS2	CEAR47M50LS2	CEAR47M50LS2	CEAR68M50LS2
C101	CKSQYB822K50	CKSQYB822K50	CKSQYB392K50	CKSQYB392K50
C151, 152	CKSQYB273K25	CKSQYB273K25	CKSQYB333K25	CKSQYB563K25

Unit Number :

Unit Name : Key Board Unit(KEH-8100SDK, 8100B, 8101B)

MISCELLANEOUS

Mark ===== Circuit Symbol & No. === Part Name Part No.

IC 901		LC7582A
IC 902		BX-1393
O 901 902 903 904	Chip Transistor	DTB123EK
O 905	Chip Transistor	DTC114TK
IL 901 902	Lamp 14V 40mA	CEL1115
IL 903 904 905 906 907 908	Lamp 14V 40mA	CEL-147
IL 909 910 911 912	Lamp 14V 40mA	CEL1013
S 1 2 3 4 5 6 7 8 9 10	Switch CSG-255	
S 11 12 13 14 15 16 17 18 19	Switch CSG-255	
	LCD	CAW1070

Key Board Unit	KEH-8100SDK KEH-8100B KEH-8101B	KEH-1500QR/ES, CA KEH-1000R KEH-1000R
Symbol & No.	Part No.	Part No.
IL909-912	Lamp 14V 40mA	CEL1013
		CEL1125

Unit Number :

Unit Name : Mechanism Control Unit

(KEH-8100SDK, 8100B, 8101B, 8100QR, 8150QI/ES)

RESISTORS

Mark ===== Circuit Symbol & No. === Part Name Part No. MISCELLANEOUS

R 901 902 903 904	RS1/10S102J	Mark ===== Circuit Symbol & No. === Part Name Part No.
R 905	RS1/10S104J	
R 906	RS1/10S470J	

CAPACITORS

Mark ===== Circuit Symbol & No. === Part Name Part No. MISCELLANEOUS

C 901	CKSQYB473K25	0 1	Chip Transistor	BA3430FS
C 902	CKSQYB331K50	0 2	Chip Transistor	2SC4116
C 903	CEA470M6R3LS	0 3	Chip Transistor	DTC143ZU
		0 4 6	Chip Transistor	DTBL13ZP
			Chip Transistor	2SC3295

RESISTORS

Miscellaneous Parts List

Mark	Circuit Symbol & No.				Part Name	Part No.	Mark	Circuit Symbol & No.				Part Name	Part No.	
R	1	2	3	4		RS1/10S104J	S	1	Switch(Handle)				CSN-078	
R	5	6	13			RS1/10S181J	HD	1	(KEH-8100SDK, 8100B, 8101B, 8100QR, 8150QR/ES)				EXA1084	
R	7	8				RS1/10S334J			Head Unit					
R	9	10				RS1/10S133J	HD	1	(KEH-700QR, 8150QR/CA)				EXA1087	
R	11	12				RS1/10S183J	M	1	Head Unit				EXA1089	
R	14					RS1/10S270J	S0	1	Motor Unit					
R	15					RS1/10S823J	S0	2	Solenoid				EXP1003	
R	16	21	26			RS1/10S473J			Solenoid				EXP1004	
R	17					RS1/10S333J								
R	18	19				RS1/10S224J								
R	20	24	25	29			RS1/10S103J							
R	22	23	27	28			RS1/8S221J							

CAPACITORS

Mark	Circuit Symbol & No.				Part Name	Part No.
C	1	2	3	4		CKSQYB391K50
C	5	6	22 μF/6.3V			CCH1065
C	7	8	14			CKSQYB103K50
C	9					CKSQYB152K50
C	10	12				CKSYB104K25
C	11		6.8 μF/25V			CCH1066
C	13		100 μF/6.3V			CCH1067
C	15	16		4.7 μF/25V		CCH1064

Mechanism Control Unit	KEH-8100SDK KEH-8100B KEH-8101B KEH-8100QR KEH-8150QR/ES	KEH-700QR KEH-8150QR/CA
Symbol & No.	Part No.	Part No.
R1-4	RS1/10S104J	RS1/10S153J

Unit Number :

Unit Name : Connector P.C. Board

Mark	Circuit Symbol & No.				Part Name	Part No.
D	1	2				F1SR35-100A
S	1	2	3		Switch(LOAD, END, F/R)	CSN1005

Unit Number :

Unit Name : Switch P.C. Board.

Mark	Circuit Symbol & No.				Part Name	Part No.
S	1	2			Switch(METAL, PLAY)	CSN1005